

Wyoming Cancer Control Plan

2011-2015



Wyoming Cancer Control Plan 2011-2015



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The Wyoming Comprehensive Cancer Control Consortium (WCCCC) is pleased to present Wyoming's Cancer Control Plan 2011-2015. To create this plan, WCCCC members evaluated the work of the past five years and recommended changes in direction and focus to strengthen the impact on the burden of cancer in Wyoming.

This strategic plan provides Wyoming with a comprehensive and integrated plan of action that outlines goals, objectives and strategies focusing on cancer prevention, early detection, diagnosis and treatment, quality of life, childhood cancer, and advocacy. The significance of personal responsibility in the areas of prevention and early detection is far reaching, not only in the lives that can be saved but also in the cost benefits that can be demonstrated within our healthcare system.

As the chairpersons for the WCCCC, we are thankful for the individuals and sponsoring organizations who dedicated their time and expertise to developing this plan. Partners in the planning process come from many sectors, including healthcare organizations and providers, oncology centers, hospice centers, insurance companies, county tobacco prevention programs, public health offices, survivors and other local, state, and federal agencies from across our state and region.

The intent of this plan is to continue to guide us in our journey toward reducing the burden of cancer in Wyoming. We know the effects of cancer are significant for each of us and it will take all of us working together to reduce the threat of cancer in our lives. It is also an invitation to you to become involved in implementing the strategies for comprehensive cancer control. All Wyomingites have a role in the fight against cancer. Working together, we can make the work of this plan a reality that will bring us one step closer to our goal to lessen the impact of cancer in Wyoming.

Wyoming Comprehensive Cancer Control Consortium Co-Chairs

A handwritten signature in blue ink that reads "Ken Esquibel".

Ken Esquibel
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Eli Bebout
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Introduction

Comprehensive Cancer Control

The National Comprehensive Cancer Control Program (NCCCP) provides an integrated and coordinated approach to reducing the impact of cancer that includes monitoring, policy, research, education, programs, services and evaluation. The Centers for Disease Control and Prevention (CDC) fund states, territories, and Native American tribes to develop public-private coalitions or partnerships such as the Wyoming Comprehensive Cancer Control Consortium (WCCCC). These partnerships bring together interested and involved groups and individuals to maximize the use of existing resources and identify new resources to further their efforts.

Comprehensive cancer control, as defined by the Centers for Disease Control and Prevention, is “an integrated and coordinated approach to reducing cancer incidence, morbidity, and mortality through prevention, early detection, treatment, rehabilitation and palliation.”¹ These efforts encourage healthy lifestyles, promote recommended cancer screening guidelines and tests, increase access to quality cancer care, and improve quality of life for cancer survivors. The Wyoming Comprehensive Cancer Control Consortium is dedicated to this approach.

History of Wyoming’s Comprehensive Cancer Control Program

Wyoming’s Comprehensive Cancer Control Program follows the national model developed in 1998 as an integrated and coordinated approach to cancer control. This table outlines some of the Program’s major milestones.

Date	Significant Event
1997	Formation of the Wyoming Cancer Advisory Committee that began formalized cancer prevention and control efforts in Wyoming.
1999	Creation of the <i>Cancer in Wyoming: A Blueprint for Action</i> report.
2002	Wyoming Department of Health (WDH) received a CDC Public Health Prevention Service (PHPS) Fellow to aid the state in laying the framework for comprehensive cancer control in Wyoming.
January 2003	Formation of the Comprehensive Cancer Control Steering Committee.
February 2004	Application for NCCCP funds through CDC.
July 2004	Receipt of CDC NCCCP Cooperative Agreement award.
September 2004	Creation of the Wyoming Comprehensive Cancer Control Consortium.
October 2005	Wyoming Cancer Control Plan 2006-2010 published.
March 2006	Establishment by the 58 th Wyoming State Legislature of <i>A Joint Resolution Expressing the Wyoming Legislature’s Support for the Efforts to Decrease Cancer in Wyoming and Enhance Cancer Survivorship</i> (including the adoption of the National Cancer Institutes 2015 Challenge – Reducing Suffering and Death Due to Cancer).

Date	Significant Event
July 2006	Interest by state legislators to fund the Wyoming State Cancer Plan based on opinion editorial written by Senator Eli Bebout.
December 2006	Creation and filing of the <i>Wyoming Cancer Control Act</i> .
March 2007	<i>Wyoming Cancer Control Act</i> signed into law by Governor Dave Freudenthal. This legislation provided \$1.6 million for enhanced cancer screening efforts and laid the foundation for future efforts in comprehensive cancer control.
July 2007	Implementation of three County Cancer Resource Centers (CCRC) located in Converse, Park, and Uinta counties.
July 2008	Creation of the Wyoming Pain Initiative and publication of <i>Recommendations for Improving Pain and Symptom Management in Wyoming</i> .
July 2008	Implementation of two additional County Cancer Resource Centers in Albany and Laramie counties for total of five centers.
June 2009	<p>Wyoming Comprehensive Cancer Control Consortium awarded the C-Change 2009 Exemplary State Comprehensive Cancer Control Implementation Award.</p> <p>Wyoming House Representative Ken Esquibel, WCCCC Co-Chair, awarded the 2009 Exemplary State Elected Official Comprehensive Cancer Control Leadership Award.</p>
July 2009	County Cancer Resource Centers were renamed to Wyoming Cancer Resource Services and “regionalized” around the existing county locations to provide cancer resource services statewide.

Wyoming Comprehensive Cancer Control Consortium

The mission of the Wyoming Comprehensive Cancer Control Consortium is to develop and implement a comprehensive approach to address cancer prevention, early detection, diagnosis and treatment, and quality of life services to lessen the impact of cancer in Wyoming. This mission is driven by the following key messages:

Success begins with VISION.

The Wyoming Comprehensive Cancer Control Consortium is charged with implementing the Wyoming Cancer Control Plan, which provides a clear vision of how we can address the second leading cause of death in the Equality State. The plan outlines Wyoming's comprehensive cancer control goals and strategies for cancer prevention, early detection, treatment, and quality of life.

The vision is based on COLLABORATION.

Comprehensive cancer control offers the power of collaboration as a key approach in reducing cancer. The Wyoming Comprehensive Cancer Control Consortium is made up of more than 90 organizations and 250 members, united through a shared vision, common commitment, and collaborative activities.

Collaboration promotes EFFICIENCY.

Cancer is a complex problem too large for any one entity to address efficiently. By pooling information, ideas, skills and strategies, a united partnership is better equipped to set priorities, enhance existing coordination, prevent overlap, maximize resources and evaluate impact.

Efficiency turns plans into ACTION.

The mission of the Wyoming Comprehensive Cancer Control Consortium is accomplished through the actions of its members. The Wyoming Comprehensive Cancer Control Consortium helps its members adapt the goals and strategies of the Cancer Control Plan, engage others in their efforts, and build community capacity.

Action yields RESULTS.

Wyoming Comprehensive Cancer Control Consortium members are carrying out Wyoming's Cancer Control Plan through activities that promote positive health behaviors, increased cancer screenings, broader access to quality treatment, and better quality of life for survivors. These results bring us closer to the ultimate goal of saving lives by reducing cancer as a significant health problem in Wyoming.

It is through the mission and key messages of the WCCCC that the burden of cancer in Wyoming is addressed.



**The Wyoming Cancer Control Plan
2011-2015 is dedicated to Wyomingites
who have lost their lives to cancer and
honors those who have survived.**

**Let this plan be a tribute to their courage
and a commitment to saving lives
in Wyoming.**

Acknowledgements

The 2011-2015 Wyoming Cancer Control Plan is the result of a statewide collaborative initiative designed to improve the state's cancer control and prevention efforts. Many thanks to the members of the Wyoming Comprehensive Cancer Control Consortium for their time and talent in designing this plan.

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Cancer Burden in Wyoming

The National Cancer Institute defines cancer as “a term used for diseases in which abnormal cells divide without control and are able to invade other tissues.”² The key term in this definition is “diseases” as cancer is not simply one disease but many diseases and there are more than 100 different types of cancer. All cancers result in morbidity (illness) and many also result in mortality (death) for the individual. While cancer tends to affect older individuals more than children, certain types of cancer can be found in people of any age.

Incidence (# of new cases diagnosed)

In 2008, there were a total of 2,414 cases of cancer diagnosed in Wyoming residents. The following table shows the number of cases diagnosed in the most prevalent cancers.

Cancer Site	# of Cases Diagnosed in 2008
Prostate	448
Breast (females only)	339
Lung	280
Colorectal	218
Bladder (with in situ)	127

Of the 2,414 cancers diagnosed in 2008, 13 were in individuals under 20 years of age. Another 287 cases were in those between the ages of 20-50 and the other 2,114 cases were diagnosed in individuals over the age of 50. While modern medicine has made great strides in treating cancer, the disease and treatment (chemotherapy, radiation, surgery) can leave a lasting and lifelong impact on the survivor and his/her family.

Mortality

Cancer is the second leading cause of death in Wyoming, second only to heart disease. In 2008, there were 875 deaths due to cancer in Wyoming residents. The leading causes of cancer death are shown in the table below.

Cancer Site	# Deaths in 2008
Lung	224
Colorectal	87
Ill-defined	73
Pancreas	59
Breast	52*
Prostate	52

*Includes two (2) males

Survival Rates

A five-year (60 months) survival rate is important when discussing cancer as it is the goal that every survivor strives to meet. A person who is diagnosed with cancer, for example breast cancer, is considered “cured” if she can survive five years after treatment and is found to have no other cancer. This does not mean that she may not develop another cancer after five years or even have a reoccurrence, but for that initial diagnosis, she is considered “cured”.

Wyoming *Relative Survival Rates (Invasive Cancer) 2000-2008

Site	12 Months	24 Months	36 Months	48 Months	60 Months
All sites	80.80%	74.60%	71.20%	68.70%	66.80%
Bladder (with in situ)	91.30%	85.70%	82.20%	78.40%	77.00%
Brain	56.40%	42.3%	38.30%	33.9%	32.60%
Breast (female only)	96.80%	94.20%	92.40%	91.00%	88.30%
Cervical	86.70%	77.6%	69.4%	68.8%	67.70%
Colorectal	82.20%	73.80%	67.40%	63.10%	60.50%
Kidney	83.9%	76.80%	74.7%	70.90%	66.70%
Leukemia	77.00%	69.50%	66.90%	61.60%	57.70%
Lung	42.80%	26.90%	21.70%	18.00%	15.80%
Melanoma	96.80%	94.70%	92.90%	91.50%	90.90%
Non-Hodgkin	82.70%	77.10%	73.80%	70.00%	67.80%
Oral Cavity	85.60%	78.80%	73.60%	66.90%	63.90%
Ovary	73.90%	64.00%	54.9%	47.80%	42.10%
Pancreas	25.10%	13.4%	6.10%	4.9%	2.60%
Prostate	99.9%	99.9%	99.9%	99.70%	99.20%
Thyroid	96.50%	96.2%	96.2%	96.2%	96.20%
Uterine	93.50%	87.50%	86.4%	86.4%	83.90%

**Relative Survival is a net survival measure representing cancer survival in the absence of other causes of death. It is defined as the ratio of the proportion of observed survivors in a cohort of cancer patients to the proportion of expected survivors in a comparable set of cancer free individuals.*

Wyoming *Relative Survival Rates (Invasive Cancer) 2000-2007

Most Common Cancers in Children Birth – 19 years

Site	12 Months	24 Months	36 Months	48 Months	60 Months
All sites	98.50%	97.60%	97.30%	94.60%	93.50%
Brain	82.80%	75.90%	75.90%	70.90%	70.90%
Leukemia	90.30%	85.90%	85.90%	85.90%	85.90%
Non-Hodgkin	88.90%	74.10%	74.10%	74.10%	74.10%

Progress Report

Wyoming Cancer Control Plan 2006-2010

A review of the WCCCC's efforts during the five-year period from 2006 to 2010 identified areas of progress and success as well as areas where more attention and focus is needed. Unless otherwise identified, progress data is from the 2009 Behavioral Risk Factor Surveillance System³ (BRFSS) or the 2009 Youth Risk Behavior Survey⁴ (YRBS).

Tobacco

	Focus Area	2003 Baseline	2009 Progress
☹️	% of adults reporting current tobacco use	32.7%	32.8% **
☹️	% of adults who tried to quit smoking	47.1%	50.1% **
😊	% of high school students reporting current tobacco use	26%	22.1%
☹️	% of high school smokers who tried to quit	57.8%	55.3%
😊	% of adults reporting their workplace does not allow smoking in any work areas	78.5%	81.3% **

Diet, Exercise, and Weight Control

	Focus Area	2003 Baseline	2009 Progress
☹️	% of adults eating five or more fruits and/or vegetables per day	22.1%	20.9% **
😊	% of adults meeting physical activity requirements	55.4%	57.3%
☹️	% of adults reporting no physical activity other than their regular job	21.1%	26.6% **
☹️	% of adults who are obese (BMI ≥ 30)	20.1%	25.4%
☹️	% of youth eating five or more fruits and/or vegetables per day	23%	19.1%
N/A	% of youth participating in insufficient amount of physical activity*	32.3%	48.2% (2007) 48.9% (2009)

*In 2007, the recommendations for physical activity in children changed from 20 minutes of vigorous activity at least 3 days/week to 60 minutes of vigorous activity at least 5 days/week. In 2007, the YRBS changed the question to be reflective of the updated recommendations; therefore, 2003 data is not comparable to data from 2007 and later.

** See Page 51

Ultraviolet Exposure

	Focus Area	2003 Baseline	2008 Progress
☹️	% of adults reporting burns from the sun in past year	48.2%	47.1% **

Radon

	Focus Area	2003 Baseline	2007 Progress
☹️	% of households tested for radon exposure	26%	29.0%
😊	% of residents who know radon exposure is a risk factor for lung cancer	57.8%	71.0%

Breast and Cervical Cancer

	Focus Area	2003 Baseline	2009 Progress
☹️	% of females over 40 years of age receiving a mammogram	69.6%	66.0% **
☹️	% of females age 18 and over receiving a pap test	83.2%	71.9% **

Colorectal Cancer

	Focus Area	2003 Baseline	2009 Progress
😊	% of men and women age 50 and older who had a sigmoidoscopy or colonoscopy	50.9%	56.4% **
☹️	% of men and women age 50 and older who had a blood stool test	18.5%	14.3% **

Healthcare Access

	Focus Area	2003 Baseline	2009 Progress
☹️	% of adults with no healthcare provider	23.9%	26.2%
☹️	% of adults reporting inability to receive care due to cost	12.5%	12.4%
☹️	% of adults reporting not having any kind of healthcare coverage	19.9%	19.3%

Goals at a Glance

Prevention

- ▲ Reduce the impact of tobacco on the burden of cancer.
- ▲ Provide programs and promote policies and practices that protect residents from secondhand smoke in areas where children are exposed, indoor workplaces, public areas and all government facilities and vehicles.
- ▲ Reduce the impact of poor nutrition, physical inactivity and the increasing obesity rates on cancer incidence and mortality.
- ▲ Reduce the incidence of skin cancer.
- ▲ Decrease radon exposure.

Early Detection

- ▲ Reduce the breast cancer death rate.
- ▲ Reduce the uterine cervix cancer death rate
- ▲ Reduce the colorectal cancer death rate.
- ▲ Reduce the prostate cancer death rate.

Diagnosis and Treatment

- ▲ Increase patient education and access to participation in high quality clinical trials for low-income and uninsured or underinsured populations.
- ▲ Increase awareness of and access to comprehensive pain assessment and management services for all cancer patients in Wyoming

Quality of Life

- ▲ Improve the quality of life for cancer patients, survivors, families and caregivers.

Childhood Cancer

- ▲ Facilitate and monitor pediatric cancer needs in the state.
- ▲ Foster the psychosocial and physical health of the child with cancer and the family.
- ▲ Increase advocacy for childhood cancer, especially on issues related to long-term survivorship, education, employment and insurance coverage.
- ▲ Increase education related to appropriate end-of-life care for childhood cancer patients.

Advocacy

- ▲ Ensure state legislators are aware of cancer issues and understand that impacting the burden of cancer is a priority to Wyoming citizens.
- ▲ Increase public awareness of the Wyoming Comprehensive Cancer Control Consortium.
- ▲ Advocate for cancer-related policy initiatives.

Health Disparities

It is well known that no one is spared the risk of developing cancer. Distinct differences in the risk and rate of many diseases, including cancer, are seen in different groups of people living in Wyoming. These differences are due in part to factors such as lifestyles, geographic and social isolation, types of employment, and religious beliefs and rituals that impact health problems specific to some population subgroups.

Addressing health disparities was a specific focus for the WCCCC in the Wyoming Cancer Control Plan 2006-2010. Seven of the eight strategies identified in this plan were successfully implemented. These focused on the following disparities identified as top priorities within the state: race and ethnicity; access to healthcare; poverty and financial status; age and gender; risk behaviors relating to tobacco, obesity, poor nutrition, physical inactivity and sunburn and cancer type including breast, cervical, colorectal, prostate and lung. The information provided below provides a current overview of the status of these health disparities.

- Race and ethnicity
 - Whites (non-Hispanic) = 86.8%
 - Native American alone = 2.5%
 - Hispanic or Latino = 7.7%
- Access to healthcare
 - Persons not covered by health insurance = 13.9%
- Poverty and financial status
 - Population in poverty = 9.4%
- Age and gender
 - Median age = 36.8 years old
 - Female population = 48.2%

*Data Source: Wyoming Administration and Information (A&I)
Economic Analysis Division Just the Facts 2010 publication*

- Current smokers = 19.9% (Whites = 19.0%; Hispanics = 23.9%)
- Obese = 25.4% (Whites = 24.3%; Hispanics = 30.5%)
- Consume fruits and vegetables less than five times a day = 76.7% (Whites = 77.4%; Hispanics = 76.1%)
- No leisure time physical activity = 22.5% (Whites = 22.8%; Hispanics = 22.0%)

Data Source: Wyoming BRFSS 2009

2008 INCIDENCE	Whites		American Indian		Hispanic	
	Rate	Number of cases	Rate	Number of cases	Rate	Number of cases
Breast (Female)	115.66	330	30.36	2	~	12
Cervix	8.81	22	17.41	1	~	4
Colorectal	38.29	208	26.17	3	~	13
Lung	52.12	282	52.13	4	~	2
Prostate	162.79	441	125.57	4	~	10

2008 MORTALITY SITE	Whites		American Indian		Hispanic	
	Rate	Number of cases	Rate	Number of cases	Rate	Number of cases
Breast (Female)	15.94	47	16.41	1	~	2
Cervix	2.65	7	0.00	0	~	0
Colorectal	15.08	82	8.44	1	~	4
Lung	41.99	219	37.71	3	~	3
Prostate	22.69	51	0.00	0	~	0

Data Source: Wyoming Cancer Registry

Note: Rates in both tables are per 100,000 and age-adjusted to the 2000 US Std. Million (18 age groups) standard.

The Consortium recognizes that the work of addressing health disparities is large and complex and requires committed, long-term partnerships and collaboration. The WCCCC envisions the focus on health disparities as an integral component and common thread that should be woven throughout all components of the Wyoming Cancer Control Plan 2011-2015 and is committed to continuing to work toward positive outcomes in the area of health disparities.

Prevention

In 2010, approximately 569,490 Americans were expected to die of cancer. This is more than 1,500 people a day. Cancer is the second most common cause of death in the United States and accounts for nearly 1 of every 4 deaths.⁵ In 2008, cancer accounted for 20% or 1 in every 5 deaths in Wyoming.⁶

Tobacco

Smoking accounts for at least 87% of lung cancer deaths and 30% of all cancer deaths.⁷⁻⁸ Smoking is linked with increased risk of at least 15 types of cancer including: nasopharyngeal, nasal cavity and paranasal sinuses, lip, oral cavity, pharynx, larynx, lung, esophagus, pancreas, uterine, cervix, kidney, bladder, stomach and acute myeloid leukemia.⁹

Smokeless tobacco products should not be considered a safe substitute for tobacco cessation. These products can cause oral and pancreatic cancers, precancerous lesions of the mouth, gum recession, bone loss around the teeth and tooth staining. Smokers who use smokeless tobacco products as a supplemental source of nicotine to postpone or avoid quitting will increase rather than decrease their risk of lung cancer.¹⁰

Based on data from the Wyoming Cancer Registry, in 2008, there were 280 cases of lung cancer and 78 cases of cancer of the oral cavity and pharynx diagnosed in Wyoming residents. There were also 243 deaths with 224 coming from lung cancer and 19 from cancer of the oral cavity and pharynx.¹¹

Tobacco avoidance as primary prevention and tobacco cessation in smokers are the key strategies to reduce the burden of primary and secondary cancers related to tobacco. In 1990, the US Surgeon General outlined the benefits of smoking cessation.¹²

- ♦ Quitting smoking will substantially decrease the risk of lung, laryngeal, esophageal, oral, pancreatic, bladder and cervical cancers.
- ♦ Regardless of age, people who quit will live longer than people who continue to smoke.
- ♦ Smokers who quit before age 50 can cut their risk of dying in the next 15 years in half, compared to those who continue to smoke.
- ♦ Quitting lowers the risk of other chronic diseases, including heart disease and stroke.

Goal 1: Reduce the impact of tobacco on the burden of cancer in Wyoming.

Objective 1: By 2015, decrease the percentage of Wyoming adults reporting current tobacco use to 29%.

Baseline: BRFSS 2009 = 32.8% **

Objective 2: By 2015, decrease the percentage of Wyoming high school students who smoked cigarettes on at least 1 day during the 30 days before the survey to 18%.

Baseline: YRBS 2009 = 22.1%

Objective 3: By 2015, decrease the percentage of Wyoming high school students who used chewing tobacco, snuff or dip on at least 1 day during the 30 days before the survey to 12%.

Baseline: YRBS 2009 = 16.2%

Objective 4: By 2015, increase the percentage of Wyoming daily smokers who stopped smoking for one day or longer in the past 12 months because of trying to quit smoking to 53%.

Baseline: BRFSS 2009 = 50.1% **

Objective 5: By 2015, increase the percentage of Wyoming high school students who stopped smoking for one day or longer in the past 12 months because of trying to quit smoking to 57%.

Baseline: YRBS 2009 = 55.3%

Strategies

1. Increase awareness and promotions surrounding the risks of tobacco use and the benefits of quitting to Wyoming adults and youth through initiatives already in place (i.e., Great American Smoke-Out, World No Tobacco Day, Through with Chew Week, Kick Butts Day, the Great American Spit Out, and the Wyoming Quit Tobacco Program).
2. Educate medical providers on counseling patients regarding tobacco use through the integration of the 5 A's (Ask, Advise, Assist, Assess, and Arrange) and the increase of statewide Screening, Brief Intervention, and Referral to Treatment (SBIRT) training.
3. Educate adults and youth on financial assistance or programs available to aid them in quitting tobacco use - specifically, education on and promotion of the Wyoming Quit Tobacco Program (WQTP). The program offers 24/7 counseling to individuals ages 12 years and older and cessation medication assistance to individuals ages 18 years and older.
4. Increase tobacco education level in youth.
5. Educate adults and youth about media literacy surrounding tobacco, including the tactics used on various targeted populations (i.e., youth, high-risk populations, etc.). Identify and integrate a statewide media literacy project surrounding tobacco prevention.
6. Educate policy makers on tobacco related issues and aid in legislation to promote tobacco control issues. Include ongoing education and advocacy of weight based tobacco taxation.
7. Identify groups at high risk for tobacco use in Wyoming. Provide tobacco education and cessation programming specifically targeting identified high-risk populations.
8. Promote already existing programs and services statewide including, but not limited to: statewide "no sales to minors" campaign, Wyoming Quitline/Quitnet and other cessation programs, Tobacco Free Schools of Excellence Programs, Through with Tobacco Programs, Tobacco Free Wyoming Community Programs and local tobacco prevention coalitions.

Evaluation

- ▲ BRFSS **See Page 51
- ▲ YRBS

Secondhand Smoke

Exposure to secondhand smoke significantly increases a non-smoker's risk of developing lung and other cancers in addition to other health problems such as decreased respiratory function and other respiratory diseases, eye and nasal irritation, heart disease and stroke. Pregnant women and children are particularly vulnerable to the health risks of exposure to secondhand smoke.¹³

According to the 2008 Wyoming BRFSS, 10.2% of non-smoking indoor workers report that they are sometimes or frequently exposed to secondhand smoke at work. Overall, 14.3% of adults who work indoors are sometimes or frequently exposed to secondhand smoke.³

Exposure to secondhand smoke is preventable. Implementation of clean indoor air policies focused on eliminating secondhand smoke exposure in workplaces, restaurants, bars and public spaces has shown a major reduction in the level of secondhand smoke exposure in shared environments.¹⁴

Goal 2: Provide programs and promote policies and practices that protect residents from secondhand smoke in areas where children are exposed, indoor workplaces, public areas, and all government facilities and vehicles.

Objective 1: By 2015, increase the percentage of Wyoming indoor workers reporting their workplace does not allow smoking in all work areas to 85%.

Baseline: BRFSS 2008 = 81.3% **

Objective 2: By 2015, increase the number of Wyoming adults reporting that smoking is not allowed anywhere inside the home at any time to 83%.

Baseline: BRFSS 2008 = 77.9% **

Strategies

1. Increase awareness of risks associated with secondhand smoke.
2. Promote the benefits of smoke-free homes (including foster homes and day care centers), restaurants, bars, workplaces and public places.
3. Promote efforts to make all state facilities smoke-free (including entryways).
4. Provide information to policymakers on risks of secondhand smoke.

Evaluation

▲ BRFSS ** See Page 51

Nutrition and Physical Activity

Scientific data suggests that approximately one-third of the cancer deaths that occur in the United States each year are due to factors related to nutrition and physical inactivity. For the

majority of Americans who do not use tobacco, dietary choices and physical activity are the most important modifiable causes of cancer risk.⁵

The American Cancer Society's most recent nutrition and physical activity guidelines published in 2006 stress the importance of weight control, physical activity, and dietary habits in reducing cancer risk.¹⁵ The social environment in which people live, work, play and go to school has a significant influence on diet and activity habits. The guidelines include an explicit *Recommendation for Community Action* to promote the availability of healthy food choices and opportunities for physical activity in schools, workplaces and communities.⁵

According to the 2009 Wyoming BRFSS, 22.5% of adults in the state reported no physical activity in the previous 30 days other than their regular job. Additionally, the 2009 BRFSS reports that over 75% (3 out of every 4) Wyoming adults do not consume the recommended number of servings of fruits and vegetables on a daily basis.³ These behaviors (or lack of) are not limited to adults. According to 2009 YRBS data, only 19.1% of high schools students ate fruits and vegetables five or more times per day, and only 48.9% of Wyoming high school students received the recommended amount of physical activity.⁴

The recommendations outlined below mirror the best nutrition and physical activity evidence available to help Americans reduce their risk not only of cancer, but also heart disease and diabetes.⁵

1. Maintain a healthy weight throughout life by balancing calories consumed with physical activity.
2. Implement a physically active lifestyle.
 - For adults - at least 30 minutes of moderate/vigorous physical activity in addition to usual activities on five or more days a week.
 - For children - at least 60 minutes of moderate/vigorous physical activity per day at least five days per week.
3. Eat a healthy diet with an emphasis on plant sources.
 - Eat five or more servings of a variety of vegetables and fruits each day.
 - Choose whole grains over processed or refined grains.
 - Limit processed and red meats.
4. Limit the number of alcoholic beverages consumed.
 - For men - no more than two drinks per day.
 - For women - no more than one drink per day.

Goal 3: Reduce the impact of poor nutrition, physical inactivity, and the increasing obesity rates on cancer incidence and mortality in Wyoming.

Objective 1: By 2015, increase the percentage of Wyoming adults who report consuming fruits and vegetables at least five times per day to 25%.

Baseline: BRFSS 2009 = 20.9% **

Strategies

1. Collaborate to promote awareness of the importance of fruits and vegetables.
2. Educate about proper serving or portion size for Wyoming adults.

3. Increase awareness of the link between cancer and poor nutrition by educating adults and families through community initiatives.
4. Increase and promote fitness activities and employee worksite wellness programs.

Objective 2: By 2015, increase the percentage of Wyoming youth who consume the recommended number of servings of fruits and vegetables per day to 25%.

Baseline: YRBS 2009 = 19.1%

Strategies

1. Promote and support changes in school and day care programs to increase the availability and promotion of fruits and vegetables.
2. Collaborate to support community-wide campaigns and projects (i.e. Action for Healthy Kids and work undertaken by WDH Maternal and Family Health Section) geared toward youth and families that promote the consumption of fruits and vegetables and proper serving or portion size.
3. Educate and advocate for the removal of soda vending machines from schools and replacing with water and 100% juice products.
4. Educate and advocate for healthy snacks to be placed in school vending machines.

Objective 3: By 2015, decrease the percentage of Wyoming adults reporting no physical activity in the past 30 days other than their regular jobs to 23%.

Baseline: BRFSS 2009 = 26.6% **

Strategies

1. Increase and promote worksite wellness programs.
2. Support partnerships with community leaders and stakeholders that support physical activity policies in community organizations and worksites.

Objective 4: By 2015, increase the percentage of Wyoming youth who were physically active for a total of at least 60 minutes per day on 5 or more of the past 7 days to 55%.

Baseline: YRBS 2009 = 51.1%

Strategies

1. Support partnerships with community leaders and stakeholders that support physical activity policies in schools and day care programs.
2. Support policies for school wellness and physical education programs.

Evaluation

- ▲ BRFSS ** See Page 51
- ▲ YRBS

Ultraviolet Exposure

In 2006, more than two million people were treated for basal cell or squamous cell cancers.⁵ Most of these skin cancers are highly curable. The most common serious form of skin cancer is melanoma, which was expected to be diagnosed in about 68,130 persons in 2010.⁵ Melanoma incidence rates have been increasing for at least 30 years. Most recently, rapid increases have occurred among young white women ages 15 to 34 years and older white men ages 65 and older.⁵

Risk factors vary depending on the types of skin cancer. The primary risk factors for melanoma include a personal or family history of melanoma and the presence of atypical or numerous moles (more than 50). Other risk factors for all types of skin cancer include sun sensitivity (sun burning easily, difficulty tanning, natural blond or red hair color); a history of excessive sun exposure, including sunburns; use of tanning booths; diseases that suppress the immune system; a past history of basal cell or squamous cell skin cancers; and occupational exposure to such things as coal tar, pitch, creosote, arsenic compounds or radiation.⁵ Living at higher altitudes, where the sunlight is strongest, also increases radiation exposure that can increase the risk of skin cancer.

According to 2008 Wyoming BRFSS data, 48.3% of Wyoming adults reported having had at least one sunburn in the past year. Additionally, nearly 7% of Wyoming adults reported having had six or more sunburns in the past year.³ Finally, the CDC estimated around 2% of males and approximately 16% of females ages 14-17 had used tanning beds in 2005.¹⁶

To help reduce the risk for skin cancer, protect skin from intense sun exposure with clothing and sunscreen that has a sun protection factor (SPF) of 30 or higher and avoid sunbathing. Wear sunglasses to protect the skin around the eyes. Because severe sunburns in childhood may greatly increase the risk of melanoma later in life, children in particular, should be protected from the sun. Avoid tanning beds and sun lamps which provide an additional source of ultraviolet (UV) radiation.⁵

Goal 4: Reduce the incidence of skin cancer in Wyoming.

Objective 1: By 2015, reduce the percentage of adults who report one or more sunburns during the past 12 months to 43%.

Baseline: BRFSS 2008 = 47.1% **

Strategies

1. Distribute educational and culturally competent materials on skin cancer prevention at parks and other recreational areas throughout the state.
2. Implement the Sun Safety Outdoor Worker Program in 25 Wyoming businesses.
3. Educate adults (especially young adults) on the risks of overexposure to the sun and tanning beds.
4. Educate Wyoming adults on the ABCDEs of skin cancer.

Objective 2: By 2015, increase the percentage of children (less than 18 years of age) who report putting on sun block (SPF 15 or higher) most of the time, when they are outside for one hour or more to 45%.

Baseline: *There is no baseline data for this objective.*

Strategies

1. Increase the number of school programs that educate students on decreasing exposure to ultraviolet (UV) light and skin cancer prevention (Wyoming Sun Safe Schools of Distinction Program).

Objective 3: By 2015, support prevention measures to reduce the percentage of Wyoming residents that use artificial sources of ultraviolet light for tanning (e.g. tanning beds).

Baseline: *There is no baseline data for this objective.*

Strategies

1. Educate on the dangers of indoor tanning beds and lamps.
2. Support legislation regarding youth and tanning bed access.
3. Develop data source to collect information on the use of tanning beds by Wyoming residents.

Evaluation

- ♦ BRFSS ** See Page 51
- ♦ Education materials
- ♦ Legislation
- ♦ Development of data source

Radon

Radon is a chemically inert, naturally occurring radioactive gas that has no smell, color, or taste. It is produced from the natural radioactive decay of uranium found in rocks and soil. In many countries, radon is the second most important cause of lung cancer after smoking. Radon is much more likely to cause lung cancer in people who smoke.¹⁷ For most people, the greatest exposure to radon comes from the home. The concentration of radon in a home depends on a variety of factors and levels are usually higher in basements, cellars, and other structural areas in contact with soil.¹⁷

According to the 2007 Wyoming BRFSS, only 29.0% of Wyoming adults reported that their home had been tested for radon. Furthermore, 35.1% did not recognize radon as a risk factor for lung cancer.³

The level of radon is determined by testing the air in the home. Radon levels can be reduced by: improving the ventilation in the home, avoiding the passage of radon from the basement into living areas, increasing under-floor ventilation, sealing floors and walls, installing a positive pressurization or ventilation system, or installing a radon sump system in the basement.¹⁷

Goal 5: Decrease radon exposure in Wyoming.

Objective 1: By 2015, increase the number of Wyoming residents reporting they have had their household air tested for radon exposure to 35%.

Baseline: *BRFSS 2007 = 29.0%*

Objective 2: By 2015, increase the number of Wyoming residents who know radon exposure is a risk factor for lung cancer to 75%.

Baseline: BRFSS 2007 = 71.0%

Strategies

1. Provide education and information to the general public about radon exposure utilizing science-based research.
2. Provide education to science, health, and industrial arts educators to promote awareness about the effects of radon.
3. Promote current radon programs and initiatives already in place by expanding testing opportunities via healthcare providers and real estate agencies.
4. Educate policymakers on the importance of radon testing.

Evaluation

- ▲ BRFSS

Early Detection

Early detection of cancers is secondary prevention as it involves identifying disease as early as possible, often before symptoms develop, and treating the disease immediately thereafter. Screening for certain cancers can increase the probability of effective, timely, and cost effective treatment. There are potential harms with any screening procedure, which is why it is important for individuals to talk with their healthcare provider about the risk and benefits of screening.

Breast Cancer

An estimated 207,090 new cases of invasive breast cancer were expected to occur among women in the United States during 2010 with about 1,970 new cases expected in men.⁵ Breast cancer is the most frequently diagnosed cancer in women (excluding skin cancers). An estimated 40,230 breast cancer deaths (39,840 women and 390 men) were expected in 2010. After lung cancer, breast cancer ranks second as a cause of cancer death in women. Death rates for breast cancer have decreased in women since 1990, which represents progress in both earlier detection and improvement of treatment.⁵

Age and gender are the most important risk factors for breast cancer. Modifiable risk factors include being overweight or obese after menopause, use of multiple hormone therapy (especially estrogen and progestin combined therapy), physical inactivity, and drinking one or more alcoholic beverages per day. Many studies have also shown that being overweight negatively impacts survival for post-menopausal women with breast cancer.⁵

In 2008, there were 334 new cases of breast cancer diagnosed in Wyoming females.¹¹ Additionally, there were 52 deaths due to breast cancer (50 women and 2 men) in 2008.¹⁸ According to the 2009 Wyoming BRFSS, only 70.3% of Wyoming women over the age of 40 had received a mammogram within the last two years³, which is one of the lowest percentages for any state in the nation.

Factors that are related to a lower risk of breast cancer include breastfeeding, moderate or vigorous physical activity and maintaining a healthy body weight. Recent studies have shown that women who are more physically active after a breast cancer diagnosis are also less likely to die from the disease than women who are inactive.⁵

Mammography can detect breast cancer at an early stage, when treatment is more effective and a cure is more likely. Numerous studies have shown that early detection saves lives and increases treatment options.⁵

The WCCCC supports all women, beginning at age 40, to consider having a mammogram every one to two years. Each woman should talk with her healthcare provider to determine her personal risk of breast cancer, what the potential harms and benefits of screening are, and what screening schedule is best for her. All women are encouraged to visit with their healthcare provider about clinical and self-breast examinations.

Goal 1: Reduce the breast cancer death rate among Wyoming women.

Objective 1: By 2015, increase the percentage of women age 40 and older that report that they have had a mammogram within the past two years to 70%.

Baseline: BRFSS 2009 = 66.0% **

Objective 2: By 2015, increase the percentage of women age 50-74 that report that they have had a mammogram within the past two years to 75%.

Baseline: BRFSS 2009 = 70.8% **

Strategies

1. Provide culturally appropriate breast cancer education to Wyoming women, their families, and their communities.
2. Raise awareness of available screening services in Wyoming through public education and information dissemination.
3. Develop a statewide marketing campaign utilizing evidence-based strategies to inform Wyoming women about breast cancer and available screening services.
4. Enhance access to screening and early detection throughout the state for low-income women and other medically underserved populations.
5. Seek additional funding and address related capacity issues for programs that provide and/or pay for breast cancer screening at low or no cost for women who are uninsured and under-insured through collaboration with partner organizations.

Evaluation

▲ BRFSS ** See Page 51

Cervical Cancer

The primary cause of cervical cancer is infection with certain types of Human Papillomavirus (HPV). An estimated 12,220 cases of invasive cervical cancer were expected to be diagnosed in 2010.⁵ With pap screening becoming more common, pre-invasive lesions of the cervix are detected far more frequently than invasive cancer. An estimated 4,210 deaths from cervical cancer were expected in 2010. Mortality rates have declined steadily over the past several decades due to prevention and early detection as a result of screening.⁵

With the advent of Pap testing in the last 40 years, the number of cervical cancers in Wyoming and the United States has dramatically decreased. In 2008, there were only 22 new cases of cervical cancer diagnosed in Wyoming women, and only seven deaths. However, not all women who should be screened are taking advantage of this test. According to the 2009 Wyoming BRFSS, only 76.8% of adult Wyoming women have regular Pap tests,³ one of the lowest rates in the nation.

The Pap test is a simple procedure that collects a small sample of cells from the cervix to be examined under a microscope. Pap tests are effective but not perfect. DNA tests to detect Human Papillomavirus (HPV) strains associated with cervical cancer can be used in conjunction with the Pap test, especially when results are unclear. The Food and Drug Administration (FDA) has approved Gardasil as the first vaccine developed to prevent the most common HPV infections that cause cervical cancer for use in females ages 9 to 24 years. Because most cervical pre-cancers develop slowly, nearly all cases can be prevented if a woman screens regularly.⁵ Gardasil has also recently been approved for use by males.

The WCCCC supports the initiation of cervical cancer screening for women beginning at age 21 and continuing every two to three years or as recommended by their healthcare provider.

Goal 2: Reduce the uterine cervical cancer death rate among Wyoming women.

Objective 1: By 2015, increase the percentage of Wyoming females age 21 and older that report they have had a Pap test within the past three years to 80%.

Baseline: BRFSS 2009 = 75.7% **

Strategies

1. Provide culturally appropriate cervical cancer education to Wyoming women, their families, and their communities.
2. Raise awareness of available screening services in Wyoming through public education and information dissemination.
3. Collaborate with partners to educate young women about the HPV vaccine and how to obtain it at low or no cost.
4. Develop a statewide marketing campaign utilizing evidence-based strategies to inform Wyoming women about cervical cancer and available screening services.
5. Enhance access to screening and early detection services throughout the state for low-income women and other medically underserved populations.
6. Seek additional funding and address related capacity issues for programs that provide and/or pay for cervical cancer screening at low or no cost for women who are uninsured and under-insured through collaboration with partner organizations.

Evaluation

▲ BRFSS ** See Page 51

Colorectal Cancer

Colorectal cancer is the third most common cancer in both men and women. An estimated 102,900 cases of colon and 39,670 cases of rectal cancer were expected to occur in the United States during 2010. An estimated 51,370 deaths from colorectal cancer were expected to occur in 2010, accounting for approximately 9% of all cancer deaths.⁵ The risk of colorectal cancer increases with age, with 91% of cases being diagnosed in individuals age 50 and older. Colorectal cancer risk is increased by certain inherited genetic mutations, a personal or family history of colorectal cancer and/or polyps or a personal history of chronic inflammatory bowel disease. Studies have also shown an association between diabetes and colorectal cancer.⁵

Colorectal cancer is one of the most commonly diagnosed cancers in Wyoming and the second leading cause of cancer death (behind only lung cancer) in the state. In 2008, there were 218 new cases of colorectal cancer diagnosed in Wyoming (116 males and 102 females). There were also 87 deaths due to colorectal cancer in 2008 (49 males and 38 females).¹¹ The screening process (sigmoidoscopy or colonoscopy) for colorectal cancer is very effective and can often times remove the risk of cancer (polyps). However, based on 2009 Wyoming BRFSS data, only 60.5% of Wyoming adults reported having had a sigmoidoscopy or colonoscopy.³

There are several factors connected to the increased risk of colorectal cancer that can be impacted through personal lifestyle changes. These include obesity, physical inactivity, and a diet high in processed and red meat, heavy alcohol consumption, inadequate intake of fruits and vegetables and possibly smoking. Studies show that compared to healthy weight individuals, men and women who are overweight are more likely to develop and die from colorectal cancer. Milk and calcium consumption appears to decrease this risk.⁵

Colorectal cancer screening can result in the identification and removal of polyps before they become cancerous as well as the detection of cancer that is at an early stage. Screening reduces mortality both by decreasing the incidence of cancer and by detecting a higher proportion of cancers at early, more treatable stages.⁵

The WCCCC supports colorectal cancer screening beginning at age 50 with a colonoscopy every 10 years. Immunochemical testing should be done annually beginning at age 50. Rescreening more frequently than every 10 years may be recommended based on results of first colonoscopy. Individuals are encouraged to talk with their provider about screening before age 50 if they have a family history of colon cancer. African Americans should begin screening at age 45.

Goal 3: Reduce the colorectal cancer death rate among Wyoming men and women.

Objective 1: By 2015, increase the percentage of adults age 50 and older who report they have ever had a sigmoidoscopy or colonoscopy to 60%.

Baseline: BRFSS 2009 =56.4% **

Objective 2: By 2015, increase the percentage of adults age 50 and older who report having used a home blood stool test kit within the past two years to 20%.

Baseline: BRFSS 2009 = 14.3% **

Strategies

1. Provide culturally appropriate colorectal cancer education to Wyoming adults, their families, and communities.
2. Raise awareness of available colorectal screening services in Wyoming through public education and information dissemination.
3. Develop a marketing campaign utilizing evidence-based strategies to inform Wyoming adults about colorectal screening services.
4. Enhance access to screening and early detection throughout the state for low-income and other medically underserved populations.
5. Educate policymakers and other advocates about the need to support and expand screening and treatment coverage.
6. Seek funding and increased capacity for programs that provide and/or pay for colorectal cancer screening at low or no cost for adults who are uninsured or under-insured.

Evaluation

▲ BRFSS ** See Page 51

Prostate Cancer

Prostate cancer is the most frequently diagnosed cancer in men, with an estimated 217,730 new cases expected to occur in the United States during 2010. Prostate cancer is the second leading cause of cancer death in men.⁵ Incidence rates are significantly higher in African American men than in white men, and the reasons for this are unclear. Prostate cancer incidence rates have changed substantially over the past 20 years, reflecting changes in prostate cancer screening with the prostate-specific antigen (PSA) blood test. The only well-established risk factors for prostate cancer are age, race/ethnicity, and family history of the disease. Approximately 63% of all prostate cancer cases are diagnosed in men age 65 and older. Genetics studies suggest that strong family predisposition may be responsible for 5-10% of prostate cancers.⁵

Prostate cancer is routinely the most diagnosed cancer in Wyoming (448 cases in 2008), but does not play a role in many cancer-related deaths (52 deaths in 2008).¹¹ While there is some controversy with some prostate cancer screening tests, specifically the Prostate Specific Antigen (PSA) test, the digital rectal exam remains an effective technique to detect swelling of the prostate. In 2008, 52.2% of Wyoming men over 50 had received a digital exam in the last year.³

There is inadequate data to recommend for or against routine testing for early prostate cancer detection. The American Cancer Society (ACS) recommends that healthcare providers discuss the potential benefits and limitations of prostate cancer early detection testing with men. ACS also recommends that the PSA blood test and a digital rectal examination (DRE) should be offered annually beginning at age 50 for men who are at average risk of prostate cancer, do not have any major medical problems and have a life expectancy of at least 10 years.¹⁹

Given the uncertainty that Prostate-Specific Antigen (PSA) testing results in more benefit than harm, a thoughtful and broad approach to PSA is critical. Patients need to be informed of the known risks and potential benefits of testing before it is undertaken.

The WCCCC supports the American Urological Association (AUA) Prostate Cancer Screening Guidelines as follows:

- PSA testing for well-informed men who wish to pursue early diagnosis. The decision to use PSA for the early detection of prostate cancer should be individualized.
- For men with an anticipated lifespan of 10 or more years who wish to be screened, the AUA recommends a baseline Prostate-Specific Antigen (PSA), along with a physical examination of the prostate (digital rectal exam – DRE) at age 40.
- Men who wish to be screened for prostate cancer should have both a PSA test and a DRE.

The WCCCC concurs with the AUA that there is no single PSA standard that applies to all men, nor should there be. Part of informed consent is giving men as much information about their personal risk as is available. Applying population-based cut points while ignoring other individual risk factors (such as age, ethnicity, family history, previous biopsy characteristics, etc.) may not give men the most optimal assessment of their risk, including risk of high-grade disease.

Goal 4: Reduce the prostate cancer death rate among Wyoming men.

Objective 1: By 2015, increase the percentage of men age 50 and older who report they have been screened for prostate cancer within the past two years to 55%.

Baseline: BRFSS 2008 = 50.4% **

Objective 2: By 2015, create a Prostate Cancer Task Force to guide prostate education and outreach efforts in Wyoming.

Baseline: *This type of resource is not currently provided to Wyoming residents.*

Strategies

1. Develop a prostate cancer task force of interested stakeholders to address the following:
 - a. Increase awareness of prostate cancer.
 - b. Increase education about prostate cancer in order to make informed decisions about testing, treatment and after-treatment options to enhance quality of life.
 - c. Increase and promote early detection of prostate cancer.
 - d. Overcome cultural and income barriers to testing and treatment for prostate cancer.
 - e. Advocate for prostate cancer legislation and funding.
 - f. Facilitate the creation of prostate cancer support groups in Wyoming and develop a network of those support groups throughout the state.
 - g. Collaborate with the WCCCC and other state organizations, healthcare providers, groups, and citizens to further the Task Force's mission statement.
2. Identify the financial barriers of uninsured and underinsured males as they relate to prostate cancer screening and consultation with a healthcare provider regarding informed decision-making.

Evaluation

- ▲ BRFSS ** See Page 51
- ▲ Education materials
- ▲ Legislation
- ▲ Number of support groups created

Diagnosis and Treatment

Approaches to the diagnosis and treatment of cancer are complex. In Wyoming, additional complications continue to exist around the lack of access to specialized diagnostic and treatment centers located close to the patients' homes, lack of medical sub-specialists and specialized modalities for diagnosis and treatment, transportation and travel costs, and cultural barriers. With continuing advancements in science and technology related to cancer diagnosis and treatment, the option of general physicians, family practitioners, internists, general pediatricians and general surgeons being responsible for much of the needed cancer treatment is greatly challenged. The obvious solution to this problem continues to be to expand the number of cancer specialists available in Wyoming but there may be inadequate patient numbers to justify recruitment of specialists to help support our existing physicians and healthcare professionals in providing better cancer care.

According to the 2009 Equality State Almanac, 14.3% of Wyoming's population was not covered by health insurance in 2007. Additionally, in 2008, 20.3% of the population lacked access to primary care – the 7th highest rate in the nation. As of 2006, there were a total of 1,132 physicians in all of Wyoming or one (1) physician for every 223 residents.²⁰ Finally, the lack of specialists, particularly pediatric oncologists, necessitates traveling out of the state for certain cancer-related diagnoses and treatments, putting a further burden on the patient and their family.

Clinical Trials

Clinical trials are research studies in which people help doctors find ways to improve health and cancer care. Clinical trials should not be seen as a last resort or last option for treatment. It is one of the last stages of a long and careful cancer research process. People can benefit from clinical trials as they have the opportunity to receive high-quality cancer care and can be among the first to benefit if a new approach is proven to work.

Goal 1: Increase patient education and access to participation in high quality clinical trials for low-income and uninsured or under-insured populations.

Objective 1: Increase knowledge of and enrollment in ongoing clinical trials.

Strategies

1. Disseminate information on clinical trials through the Wyoming Comprehensive Cancer Control Consortium website at www.fightcancerwy.com.
2. Support establishment of professional training mechanisms and information resources that will increase healthcare provider and general public knowledge about clinical trials.
3. Create a clearinghouse for current clinical trials and increase patient participation in these trials.

Evaluation:

- ▲ Wyoming State Almanac
- ▲ Clinical Trial Clearinghouse

Pain Management

Untreated and undertreated pain is a serious public health concern in Wyoming and the United States. The Wyoming Pain Initiative (WPI) was founded as a result of the Wyoming Cancer Control Act of 2007 (Senate Enrolled Act 92). A Wyoming Pain Advisory Committee brought together a large stakeholder group to research issues related to pain management in Wyoming and to provide programmatic and policy recommendations. These recommendations were outlined in the white paper *“Recommendations for Improving Pain and Symptom Management in Wyoming”*. Work continues in bringing these recommendations to the forefront.

Goal 2: To increase awareness of, and access to, comprehensive pain assessment and management services for all cancer patients in Wyoming.

Objective 1: Increase data collection surrounding pain management.

Strategies

1. Collect additional data through BRFSS about pain incidence and pain control.
2. Obtain funding and complete a comprehensive study on knowledge, attitudes and beliefs surrounding pain management and the use of prescription drugs to alleviate pain.
3. Complete a cost analysis/cost study on the economic impact of pain in Wyoming.

Objective 2: Increase knowledge and understanding of the challenges associated with adequate pain control and the need for intervention.

Strategies

1. Implement recommendations outlined in the *“Recommendations for Improving Pain and Symptom Management in Wyoming”* – a white paper of the Wyoming Pain Initiative.
 - a. Support efforts to continue to fund and implement the Wyoming Pain Initiative to reduce the economic and physical impact of pain in Wyoming.
 - b. Improve data collection and surveillance at the state and local levels to obtain a clear picture of the pain management problem in Wyoming.
 - c. Encourage continuing education in pain and symptom management for Wyoming providers.
 - d. Modify existing policies or adopt new policies to enhance pain and symptom management in Wyoming.
 - e. Encourage and support development of public and provider education surrounding pain and symptom management.
 - f. Provide culturally appropriate pain education and care on the Wind River Indian Reservation.

Evaluation

- ▲ BRFSS
- ▲ *“Recommendations for Improving Pain and Symptom Management in Wyoming”*

Quality of Life

Quality of life (QOL) issues have always been areas of concern for cancer patients and cancer survivors. For decades, the primary focus of cancer research was on diagnosis and treatment. An important shift has been made to view cancer patients and survivors in a much more holistic way with attention now focusing on their psychological, social and spiritual needs.

Pain management and palliative and end-of-life care were the first issues to be addressed in QOL research for cancer patients. Pain management for both acute and chronic pain continues to be a vital part of quality of life discussions for cancer patients and survivors. The goal of palliative care is to provide the best possible quality of life for patients and their families. Pain management, rehabilitation and hospice care continue to be the backbone of the quality of life issues for cancer patients.

According to the Wyoming Workers Compensation Program in 2006, there were 23,896 bills paid for claims involving pain of some type (e.g., back pain, leg pain, and joint pain) costing over \$6.4 million dollars. Additionally, in 2006, there were 6,544 discharges from Wyoming hospitals related to a diagnosis of pain. While cancer pain could not be specifically separated from this data, it is clear that pain affects thousands of Wyoming residents every year and an integrated and organized plan to address pain in Wyoming is needed.

Goal 1: Improve the quality of life for cancer patients, survivors, families and caregivers.

Objective 1: By 2015, develop strategies to connect cancer patients, survivors, families and caregivers to available local, regional, and national cancer resources.

Strategies

1. Utilize the Wyoming County Profile to identify communities and healthcare systems that continue to need expansion of support personnel, programs, and availability.
2. Identify where QOL support programs are lacking and evaluate the possibility of expanding QOL programs to fill this need.

Evaluation

- ▲ Wyoming Workers Compensation
- ▲ Wyoming Hospital Discharge Database

Objective 2: By 2015, expand access to end-of-life and palliative care outside the hospice care setting.

Strategies

1. Identify the unmet end-of-life and palliative needs and educate patients and their families via a Quality of Life Task Force.
2. Utilize healthcare professionals and healthcare institutions with comprehensive QOL and pain management programs to serve as education providers for other in-state practitioners.

Evaluation

- ▲ Task force roster and meeting minutes
- ▲ Provider education opportunities

Objective 3: By 2015, connect cancer patients and survivors to necessary available resources using patient advocates and other patient support services.

Strategies

1. Use existing advocacy programs, including but not limited to, the American Cancer Society's Patient Navigation Program, to serve as a model in Wyoming.
2. Recruit and train patient advocates and develop partners in this process.
3. Explore training opportunities through psychosocial training, definition of cancer training and cancer training 101 to educate volunteers working with patients.
4. Work with healthcare systems, institutions, and individual physicians' offices to develop a system to connect patients and advocates.
5. Identify or develop survivor toolkits with necessary resources to aid survivors in healing physically, emotionally, and financially.
6. Develop educational opportunities for the medical community and the public that include issues of survivorship, caring for the whole person and psychosocial needs.

Evaluation

- ▲ Number of patient advocates recruited and trained
- ▲ Patient surveys
- ▲ Number of toolkits disseminated

Objective 4: By 2015, increase the proportion of Wyoming cancer patients whose pain is adequately controlled.

Strategies

1. Provide education and information surrounding pain management to healthcare providers, cancer patients and their families as well as cancer control advocates.
2. Establish a representative from the Quality of Life Task Force to be a member of the Wyoming Pain Initiative.
3. Promote and disseminate the National Comprehensive Cancer Network (NCCN) guidelines pertaining to pain management to healthcare providers, case managers, patient advocates, nursing homes and other healthcare professionals in conjunction with the Wyoming Pain Initiative.
4. Identify and evaluate possible data sources for tracking progress of pain and symptom management as presented through the Wyoming Pain Initiative and reported by the Quality of Life Task Force representative.

Evaluation

- ▲ Pain management education and information materials
- ▲ Dissemination of NCCN pain management guidelines
- ▲ BRFSS

Objective 5: By 2015, collect data pertaining to QOL issues.

Strategies

1. Assess data currently collected.
2. Identify possible data collection methods.
3. Educate and inform stakeholders of the need to collect data pertaining to QOL.
4. Create a system to collect QOL data.

Evaluation

- ▲ Wyoming Workers Compensation
- ▲ Wyoming Hospital Discharge Database
- ▲ BRFSS

Childhood Cancer

Cancer is the second leading cause of death in children, exceeded only by accidents.⁵ Cancer kills more children than asthma, diabetes mellitus, cystic fibrosis, congenital anomalies and AIDS combined.²² Over the past 20 years, there has been some increase in the incidence of children diagnosed with all forms of invasive cancer.²³ An estimated 10,700 new cases were expected to occur among children ages 0 to 14 nationwide in 2010.⁵ The two most common childhood cancers are leukemia (31% of all childhood cancers) and brain or other nervous system cancers (21.3%). An estimated 1,340 deaths were expected to occur nationwide in 2010, with about one-third of these from leukemia. Mortality rates for childhood cancer have declined by 50% since 1975, attributable largely to improved treatments and the high proportion of patients participating in clinical trials.⁵

In Wyoming, from 2000-2008, there were 185 cases of cancer diagnosed in children and youth age 0-19 years. This represents approximately 20 cases per year.¹¹ During this same period and for the same age group, there were 28 reported deaths.²¹ This is notable as these children's deaths represent 1,796 Years of Potential Life Lost (YPLL).

Currently, all Wyoming children diagnosed with cancer must travel out of state to receive specialized cancer care, as there are no cancer programs or hospitals in the state staffed and equipped to handle these special cases. As mentioned in the Wyoming Comprehensive Cancer Control Consortium publication, *Childhood Cancer: A Look at Wyoming's Most Valuable Resources*, many childhood cancer survivors experience late effects from their cancer and its related treatment. These long-term effects may include infertility and stunting normal physical and mental development. Other known medical issues include learning disabilities, toxicity complications and re-occurrence of the cancer.

Unlike many cancers in adults, there are no avoidable risk factors that are known to influence a child's risk of getting cancer. When a child does develop cancer, it is important to know that there is nothing the child or the parents did to cause it.²⁴ Early symptoms are usually nonspecific so parents should ensure that children have regular medical check-ups and be alert to any unusual and persistent symptoms. These may include an unusual mass or swelling; unexplained paleness or loss of energy; sudden tendency to bruise; a persistent, localized pain; prolonged, unexplained fever or illness; frequent headaches, often with vomiting; sudden eye or vision changes; and excessive, rapid weight loss.⁵

Goal 1: Facilitate and monitor pediatric cancer needs in Wyoming.

Objective 1: By 2015, establish a pediatric cancer task force in Wyoming.

Strategies

1. Create list of stakeholders with regard to childhood cancer issues.
2. Invite stakeholder to face-to-face meeting to discuss the development of a task force.
3. Recruit interested parties to newly developed task force.
4. Identify and share information about the resources available to the families of children in Wyoming who are battling cancer.

5. Provide a forum where members can network, support each other, share resources as appropriate, and learn more about the services in place in communities around the state.
6. Function as a resource for newly emerging organizations – to support their work and to help them understand what services are already in place in their communities.
7. Provide a cohesive body that can support advocacy work done on behalf of children with cancer.

Evaluation

- ▲ Taskforce roster
- ▲ Meeting minutes

Objective 2: By 2015, prioritize and implement advocacy-related efforts surrounding childhood cancer.

Strategies

1. Hold monthly/bi-monthly meetings to identify issues related to policy that impact childhood cancer.
2. Prioritize policy issues as they relate to urgency and need.
3. Implement advocacy campaign.

Evaluation

- ▲ Meeting minutes
- ▲ Campaign materials

Goal 2: Foster the psychosocial and physical health of the child with cancer and the family.

Objective 1: By 2015, maximize the quality of life of the child with cancer and the family.

Strategies

1. Conduct a statewide survey to identify existing psychosocial support mechanisms in place to assist children and families impacted by childhood cancer.
2. Identify community resources for psychosocial support for children with cancer and their families in conjunction with a capacity and needs assessment.
3. Develop a camp to bring childhood cancer patients and their parents together.

Evaluation

- ▲ Survey results
- ▲ Plans for camp
- ▲ Camp roster

Objective 2: By 2015, identify and increase resources available to enhance the quality of life specific to children with cancer.

Strategies

1. Obtain a childhood cancer provider in Wyoming for follow-up care.
2. Provide a network of support for parents and caregivers to ensure they are adequately trained to care for their child's needs throughout treatment.
3. Raise the awareness of parents and medical professionals about the need for adolescent and young adult patients to be actively involved in the decision making process regarding the course of treatment and in medical conversations relating to their care, treatment and other options.
4. Increase awareness about the support services available to children with cancer and their families.

Evaluation

- ▲ Network education materials
- ▲ Number of people referred to support services via network

Goal 3: Increase advocacy for childhood cancer, especially on issues related to long-term survivorship, education, employment, and insurance coverage.

Objective 1: By 2015, educate childhood cancer survivors and families about issues relating to childhood cancer.

Strategies

1. Investigate established models for teaching childhood cancer advocacy to the lay community. Host a statewide "Childhood Cancer Symposium" for parents and childhood cancer survivors utilizing the advocacy model.
2. Collaborate with multi-disciplinary organizations (i.e. American Cancer Society, Wyoming Education Association, and School Nurse Association) to ensure participation in childhood cancer symposium.

Evaluation

- ▲ Symposium materials
- ▲ List of symposium participants

Objective 2: By 2015, educate legislators and other decision-makers about issues related to childhood cancer.

Strategies

1. Gather input from the Childhood Cancer Task Force to determine priority areas relating to policy development, including but not limited to, insurance barriers, patient navigation, and the potential for individual caseworkers.
2. Collaborate with additional grassroots survivorship organizations to advocate for childhood cancer issues.
3. Develop and obtain funding for an advocacy campaign on childhood cancer concerns targeting policymakers.

Evaluation

- ▲ Taskforce documents on priority areas
- ▲ Minutes from meetings with grassroots organizations
- ▲ Funding mechanisms identified and grant(s) written

Goal 4: Increase education related to appropriate end-of-life care for childhood cancer patients.

Objective 1: By 2015, identify existing hospice centers in Wyoming that are willing to provide end-of-life care for children with cancer.

Strategies

1. Survey hospice centers and hospitals about end-of-life care regarding children with cancer.
2. Share results with Childhood Cancer Task Force, WCCCC members, and other interested stakeholders.

Evaluation

- ▲ Survey of hospice centers and hospitals

Objective 2: By 2015, increase education and ensure appropriate training for all staff involved with end-of-life care for pediatric, adolescent and young adult patients.

Strategies

1. Identify possible funding sources for training medical professionals involved in end-of-life care.
2. Increase/provide funding for pediatric hospice center resources.
3. Increase awareness of the needs of the child and family regarding continuum of care through end-of-life.

Evaluation

- ▲ Training materials
- ▲ Feedback from hospice staff

Objective 3: By 2015, provide families with the resources needed to deal with grief after the death of a child.

Strategies

1. Ensure that resources such as grief counseling, the Butterfly Project, and sibling support/play therapy groups are in place and made readily available to families in need.
2. Educate healthcare professionals about the need to continue to support families after the death of a child when necessary.
3. Educate teachers, school counselors, school communities and childhood cancer treatment centers to understand the unique and differing needs of children and families after the death of a child.

4. Work to develop re-entry plans for siblings returning to school. Part of the plan will be to educate teachers about emotional needs of siblings. The sibling's classmates will be informed about what to expect when the student returns to class.

Evaluation

- ▲ Educational materials
- ▲ Feedback from educators, healthcare professionals, and relatives

Advocacy

Advocacy can be a tool to develop a foundation for identifying and motivating passionate constituents and partners as well as providing sustainability to the efforts of the Wyoming Comprehensive Cancer Control Consortium. The overall goal of advocacy is to influence public policy to help reduce the burden of cancer in Wyoming. This has been demonstrated by the passage of the Wyoming Cancer Control Act in 2007, as well as other cancer related legislation focusing on the Wyoming Cancer Resources Services projects, tanning salons and minors, youth access to tobacco cessation programs and Wyoming insurance solutions legislation. This work further proves that each resident is an instrumental voice and integral part in the success of the Wyoming Cancer Control Plan.

Goal 1: Ensure that state legislators are aware of cancer issues throughout the state and understand that impacting the burden of cancer is a priority to citizens of Wyoming.

Objective 1: Identify issues/bills each year in which the WCCCC can have a meaningful impact on the legislative process.

Strategies

1. Determine national and state legislation with a direct connection to cancer.

Objective 2: Make recommendations to the WCCCC on core issues where the WCCCC will request grassroots participation to contact legislators and policymakers.

Strategies

1. Work with representatives of the American Cancer Society and other national resource partners to identify cancer advocacy efforts in other states that have been successful and make recommendations to the WCCCC in the fall before upcoming sessions each year.

Objective 3: Educate WCCCC members on how they can influence legislators.

Strategies

1. Train eligible partners in working to strengthen grassroots advocacy efforts around the state as part of the annual Celebration of Hope event.
2. Educate cancer survivors and their loved ones on the importance of being involved in the political process in a variety of ways – including voting, serving on committees and task forces, serving as lawmakers, lobbying and educating.

Goal 2: Increase public awareness of the Wyoming Comprehensive Cancer Control Consortium.

Objective 1: Increase public awareness of the Wyoming Comprehensive Cancer Control Consortium.

Strategies

1. Establish baseline data for public awareness.
2. Develop a unified message for WCCCC members.
3. Increase statewide representation in the Consortium with special focus on tribal representation.
4. Develop and organize an e-mail alert system to alert coalition member of legislative action.
5. Sponsor a legislator reception during the session to support development of personal relationships between coalition members and legislators.

Goal 3: Advocate for cancer-related policy initiatives.

Objective 1: Advocate for cancer-related policy initiatives.

Strategies

1. Increase WCCCC advocacy communications.
2. Increase WCCCC member participation in legislative advocacy.
3. Increase the number of funding sources to support the implementation of the cancer control plan.
4. Increase WCCCC communication with the general public to strengthen public awareness of emerging cancer-related policy initiatives.

Evaluation

- ▲ Core issue recommendations
- ▲ Education materials and dates of trainings
- ▲ List of new consortium members
- ▲ Copies of e-mail alerts List of WCCCC members who participated in legislative advocacy

Call to Action

Wyoming Cancer Control Plan

What can you do?

The Wyoming Comprehensive Cancer Control Plan lays out 19 broad goals that will make significant progress in reducing the burden of cancer among all Wyomingites. To accomplish these goals, everyone needs to be involved in the effort. The Wyoming Comprehensive Cancer Control Consortium and their constituent groups will work to achieve these goals, and there are things that each of us can begin to do right now to help work toward the mission of making cancer history for all residents of the Equality State.

Below are a few examples of what you can do to help work toward the goals presented here. Use these examples, and think of other actions you can take to reduce the burden of cancer throughout Wyoming. Fill in the blank spaces with your own ideas. Share your ideas by sending them to the Wyoming Comprehensive Cancer Control Program, 6101 Yellowstone Road, Suite 259A, Cheyenne, Wyoming 82002.

If you are a hospital

- Ensure that your cancer cases are reported in a timely manner.
- Provide meeting space for cancer support groups.
- Collaborate to sponsor community screening programs.
- Acquire or maintain American College of Surgeons membership.

AND _____

If you are a local health department or community health center

- Provide cancer awareness information to residents.
- Collaborate in community walking campaigns.
- Work with physicians to promote screening programs and case reporting.
- Provide space for survivor support groups.

AND _____

If you are a community-based organization

- Provide cancer awareness information to constituents.
- Promote cancer screening among clients.
- Encourage participation in clinical trials.
- Collaborate to provide community prevention programs.

▪ AND _____

If you are a professional organization

- Provide cancer awareness information to constituents.
- Promote cancer screening among clients.
- Encourage participation in clinical trials.
- Collaborate to provide community prevention programs.

AND _____

If you are an employer

- Provide healthy foods in vending machines and cafeterias.
- Encourage employees to increase physical activity.
- Consider implementing a worksite wellness program.
- Provide a smoke-free workplace.
- Collaborate with hospitals to host screening events.

AND _____

If you are a school/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.

AND _____

If you are a faith-based organization

- Provide cancer prevention information to members.
- Learn how to provide healthy potlucks and meeting meals.
- Open your building for walking clubs in cold weather.
- Encourage members to get cancer screening tests on time.

AND _____

If you are a physician

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

AND _____

If you are a legislator

- Appropriate funding for comprehensive cancer control.
- Sponsor or support legislation that promotes cancer prevention and control.
- Ensure that all Wyomingites have access to healthcare and to cancer early detection screening programs.
- Ensure that tobacco settlement funds are used for tobacco and cancer control purposes.

AND _____

If you are a Wyomingite

- Stop smoking or never start.
- Eat more fruits and vegetables and maintain a healthy weight.
- Increase your daily physical activity.
- Know when to be screened and do it on schedule.
- Support smoke-free environment legislation.
- If diagnosed, consider enrolling in a clinical trial.
- Show your support and care for those who are diagnosed.
- Volunteer with your hospital, health center, faith community, or local American Cancer Society.

AND _____

We are NOT powerless against cancer! Each of us can do many things each day that will ultimately reduce both our own personal risk of cancer, and in turn, Wyoming's overall cancer burden. In the end, we will look back and say we had a part in "making cancer history for all Wyomingites!"

Evaluation Plan

The Wyoming Department of Health is committed to the implementation of an evaluation plan for the Wyoming Comprehensive Cancer Control Program. This evaluation plan focuses on the goals, objectives and strategies outlined in the 2011-2015 Wyoming Cancer Control Plan, as well as the Wyoming Comprehensive Cancer Control Consortium (WCCCC) process and priority issue development. The plan addresses evaluation stakeholders and primary intended users, program background and description, evaluation design and methods and dissemination and utilization of findings.

The purpose of the evaluation plan is to serve as the guidance document for the progress made in implementing this plan and addressing the mission of the Consortium, which is to reduce the impact of cancer through the development and implementation of a comprehensive approach to address cancer prevention, early detection, diagnosis and treatment and quality of life services.

The Wyoming Comprehensive Cancer Control Program Evaluation Plan is available on the program's website at:

<http://wdh.state.wy.us/phsd/ccc/index.html>

To request a hard copy of this report, please contact:

Wyoming Comprehensive Cancer Control Program
Wyoming Department of Health
6101 Yellowstone Road, Suite 259A
Cheyenne, Wyoming 82002

NOTE: *The 2009 BRFSS data in the Wyoming Cancer Control Plan 2011-2015 is different from the official BRFSS estimates. BRFSS is making a change in the methods used to weight the data that will become official in 2011. This change will significantly affect our ability to track progress toward 2015 objectives. The new weighting method has been applied to the 2009 data in this plan to set objectives that allow for better tracking of 2015 objectives.*

Glossary of Terms

Advocacy: The act or process of supporting a cause, idea or policy.

Basal Cell Carcinoma: A type of highly curable skin cancer found in the lowest part or base of the epidermis, which is the outer layer of the skin.

Baseline: An initial or known value to which later measurements can be compared.

Behavior Risk Factor Surveillance System (BRFSS): An ongoing statewide telephone survey of adults age 18 years and older. The purpose of the survey is to gather information on the prevalence of health behaviors and conditions that are known to contribute to or increase the risk of chronic disease, acute illness, injury, disability and premature death.

Butterfly Project: A children's book and stage production that focuses on the grieving process for children who have lost friends to childhood cancer.

Cancer: A term for diseases in which abnormal cells divide without control. Cancer cells can invade nearby tissues and can spread through the bloodstream and lymphatic system to other parts of the body.

Cancer Burden: The overall impact of cancer in a given community.

Carcinogen: Any substance known to cause cancer.

Cervix: The lower, narrow end of the uterus that forms a canal between the uterus and vagina.

Chronic Disease: A disease or condition that persists or progresses over a long period of time. These include cardiovascular disease, diabetes, obesity, cancer and respiratory disease and are now the major cause of death and disability worldwide.

Clinical Trials: A type of research study that tests how well new medical approaches work in people. Each study is designed to find better ways to prevent, detect, diagnosis or treat cancer and to answer scientific questions.

Cognitive: Relating to or involving conscious intellectual activity such as thinking, reasoning and remembering.

Comprehensive Cancer Control: An integrated and coordinated approach to reduce cancer incidence, morbidity and mortality through prevention, early detection, treatment, rehabilitation and palliation. A collaborative process through which a community pools resources to reduce the burden of cancer.

Diagnosis: The process of identifying a disease by the signs and symptoms.

Digital rectal examination (DRE): An examination to detect cancer in which a doctor inserts a lubricated, gloved finger into the rectum to feel for abnormalities.

Early Detection: The detection of disease among people who do not yet have symptoms, usually through a screening test.

End-of-Life: The final stage of survival as a patient approaches death.

Epidemiology: The study of disease incidence and distribution in populations, and the relationship between environment and disease. Cancer epidemiology is the study of cancer incidence and distribution as well as the ways surroundings, occupational hazards and personal habits may contribute to the development of cancer.

Evidence-Based: The process of systematically appraising and using simultaneous research findings as a basis for clinical decisions.

Fecal Occult Blood Test (FOBT): A test to check for small amounts of hidden blood in the stool.

Follow-up: Monitoring a person's health over time after treatment. This includes keeping track of the health of people who participate in a clinical study or clinical trial for a period of time, both during the study and after the study ends.

Genetic: Inherited, having to do with information that is passed from parents to children through DNA in the genes.

Health Disparities: Differences in the incidence, prevalence, mortality and burden of cancer and related adverse health conditions that exist among specific population groups in the United States.

High Risk: When a chance for developing cancer is greater for an individual or a group of people than it is for the general population, that individual or group is considered to be at high risk. People may be considered to be at high risk from many factors or combination of factors, including family history of the disease, personal habits or exposure to carcinogens in the environment or in the workplace.

Hospice Care: Quality, compassionate care that incorporates a team-oriented approach to medical care, pain management and emotional and spiritual support tailored to the needs and wishes of a patient facing life-limiting illness or injury.

Human Papillomavirus (HPV): More than 100 types of viruses that cause various human warts (as the common warts of the extremities, plantar warts, and genital warts) including some associated with the production of cancer. More than 30 of these papilloma viruses are sexually transmitted. HPVs are now recognized as a major cause of cervical cancer.

Incidence: The number of newly diagnosed cancer cases that occur in the population per unit of time, usually one year. The Wyoming Cancer Surveillance Program maintains cancer incidence data in Wyoming.

Incidence Rate: The number of new cases of cancer diagnosed in one year per 100,000 persons in a population.

Informed decision-making: Choices and preferences stated after the individual understands the nature and risks of the cancer diagnosis and treatment options.

In Situ: In its original place. For example, in carcinoma in situ, abnormal cells are found only in the place where they first formed. They have not spread.

Invasive Cancer: Cancer that has spread beyond the layers of tissue in which it developed and is growing into surrounding healthy tissue – also called infiltrating cancer.

Mammography: An x-ray of the breast.

Melanoma: The most common serious form of skin cancer. Cancer of the cells that produce pigment in the skin and usually begin in a mole.

Metastasis: The spread of cancer cells from the original site to other parts of the body.

Morbidity: A disease or the incidence of disease within a population. Morbidity also refers to adverse effects caused by a treatment.

Mortality Rate: The rate expressing the proportion of a population who die of a disease, or of all causes. The numerator is the number of persons dying; the denominator is the total population in which the deaths occurred. The unit of time is usually a calendar year. To produce a rate that is a manageable whole number, the fraction is usually multiplied by 1,000 to produce a rate per 1,000. This rate is also called the “crude death rate”.

National Comprehensive Cancer Control Program (NCCCP): Established in 1998 by the Centers for Disease Control and Prevention (CDC) to provide seed money and technical support for the development and implementation of comprehensive cancer control plans through an integrated and coordinated approach to reducing the impact of cancer that includes monitoring, policy, research, education, programs, services and evaluation.

National Comprehensive Cancer Network (NCCN): A not-for-profit alliance of 20 of the world’s leading cancer centers dedicated to improving the quality and effectiveness of care provided to patients with cancer.

Obesity: A condition in which a person has abnormally high amounts of unhealthy body fat.

Ovaries: The pair of female reproductive glands in which the ova, or eggs, are formed. The ovaries are located in the lower abdomen, one on each side of the uterus.

Overweight: Being too heavy for one’s height. Excess body weight can come from fat, muscle, bone and/or water retention. Being overweight does not always mean being obese.

Pain Management: Encompasses pharmacological, non-pharmacological and other approaches to prevent, reduce or stop pain. Pain can have a negative impact on a person’s quality of life and impede recovery from illness or injury. Managing pain properly facilitates recovery, prevents additional health complications and improves quality of life.

Palliative Care: Active and compassionate care of chronically and terminally ill patients with an emphasis on the control of pain and symptoms; incorporates an effort to fulfill physical, emotional, spiritual, social and cultural needs. Palliative care does not alter the course of a disease, but improves the quality of life.

Pap (Papanicolaon) Test: A test for cervical cancer that examines cells that are scraped from the cervix; can detect cancer and pre-cancerous conditions. A pap test can also show noncancerous conditions, such as infection or inflammation.

Prevalence: The proportion of a specified population with a specified condition at a given point in time.

Prevention: In medicine, action taken to decrease the chance of getting a disease or condition. For example, cancer prevention includes avoiding risk factors (such as smoking, obesity, lack of exercise and radiation exposure) and increasing protective factors (such as getting regular physical activity, staying at a healthy weight and having a healthy diet).

Primary Prevention: Preventing or reducing risks of developing a disease, done through promotion of individual behavior change or at the system level through policy change. Refraining from tobacco use to prevent lung cancer is an example of primary prevention.

Prostate: A gland in the male reproductive system found below the bladder and in front of the rectum.

Prostate Specific Antigen (PSA) Test: A blood test that measures the level of prostate-specific antigen (PSA), a substance produced by the prostate and some other tissues in the body. Increased levels of PSA may be a sign of prostate cancer.

Physical Activity: Any bodily movement produced by skeletal muscles that result in energy expenditure.

Psychosocial: Describes the psychological, social, and spiritual aspects of human activity, such as the care of people with a disease.

Quality of Life: The concept of ensuring that cancer patients are able to lead the most comfortable and productive lives possible during and after treatment. New treatment techniques and social and emotional support groups are adding to the quality of life for cancer patients, as well as to their survival.

Radon: A radioactive gas that is released by uranium, a substance found in soil and rock. Exposure can damage lung cells and lead to lung cancer.

Rectum: The last 8-10 inches of the large intestine that stores solid waste until it leaves the body.

Risk Factor: Something that may increase a person's chances of developing a disease. Some examples of risk factors for cancer include age, a family history of certain cancers, use of tobacco products, certain eating habits, obesity, lack of exercise, exposure to radiation or other cancer-causing agents and certain genetic changes.

Screening: Routine medical tests that are given if an individual is at or over a certain age, or has a family history or other risk factors for any medical condition. Early detection can mean that a serious health problem or problems may be avoided.

Screening, Brief Intervention, and Referral to Treatment (SBIRT): A comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with substance use disorders as well as those who are at risk of developing these disorders. In Wyoming, SBIRT is implemented through screening protocols used by the state's public health nursing offices.

Secondary Prevention: Involves identifying disease as early as possible, often before symptoms develop, and treating the disease immediately thereafter. Two examples are mammography for detecting breast cancer and Pap tests for detecting cervical cancer.

Secondhand Smoke: Smoke that comes from the burning end of a cigarette and smoke exhaled by smokers. Also called environmental tobacco smoke or ETS. Inhaling ETS is called involuntary or passive smoking.

Sigmoidoscopy: A procedure in which a physician looks inside the rectum and the lower part of the colon (sigmoid colon) through a flexible lighted tube. The physician may collect samples of tissue or cells for closer examination (also called proctosigmoidoscopy).

Squamous Cell Carcinoma: A highly curable cancer found in the tissue that forms the surface of the skin.

Surveillance: Close and continuous observation, screening, and testing of those at risk for a disease.

Survivorship: The experience of living with, through, or beyond cancer; a continual, ongoing process that begins at the moment of diagnosis and continues for the remainder of life; composed of stages, or phases of survival. Survivorship covers the physical, psychosocial, and economic issues of cancer. It includes issues related to the ability to get healthcare and follow-up treatment, late effects of treatment, second cancers, and quality of life.

Youth Risk Behavior Surveillance Survey (YRBS): CDC funded survey that monitors priority health risk behaviors that contribute to the leading causes of death, disability and social problems among youth in the United States. The Wyoming survey is conducted every two years by the Wyoming Department of Education to provide data representative of 9-12 grade students in public schools across the state.

Worksite Wellness: Programs designed to promote workforce health to support reduction in employer costs and improved employee health and morale. The Wyoming Worksite Wellness toolkit provides an easy to use, effective, flexible guide to build a wellness program.

<http://wdh.state.wyo.us/phsd/heartdisease/workwellness.html>

Wyoming Pain Initiative (WPI): Founded as a result of the Wyoming Cancer Control Act of 2007. This legislation authorized development of a Pain Advisory Committee to research issues related to pain management in Wyoming and provide programmatic and policy recommendations. Recommendations were outlined in a white paper published in January 2009 entitled “*Recommendations for Improving Pain and System Management in Wyoming*”.

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