

# OWYHEE COUNTY CANCER PROFILE

*A fact sheet from the Cancer Data Registry  
of Idaho, Idaho Hospital Association.*

**Cancer Incidence 2003-2007  
Cancer Mortality 2004-2008  
BRFSS 2000-2008**

## CANCER

Cancer is a group of more than 100 different diseases, each characterized by uncontrolled growth and spread of abnormal cells. Cancer risk increases with age, and varies by gender and race. As the average age of the population increases, the incidence of cancer will increase as well.

It is generally accepted that 65-80% of all cancers are related to personal lifestyle or environmental factors, such as smoking and diet, and are therefore preventable. Other factors such as age, gender, and family history of specific cancers are also associated with cancer and aid in the identification of people at high risk.

For some cancers, effective treatment is available. For these cancers, early detection saves lives. For example, early detection of breast cancer in women 50 years of age and older has decreased breast cancer mortality by 30%. These patterns indicate opportunities for disease control and for reducing the number of cancer deaths through prevention, early detection, and treatment of the disease. Access to detection services is a key consideration.

## RISK FACTORS AND INTERVENTIONS

### Aging:

Because the population is aging, the number of new cancer cases and cancer deaths that occur each year will continue to increase unless the trend is reversed by significant improvements in prevention, early detection, and treatment.

### Smoking:

Smoking and the use of smokeless tobacco are responsible for the majority of all cancers of the lung, trachea, bronchus, larynx, pharynx, oral cavity, and esophagus. Smoking is the leading cause of preventable death in the United States.

### Diet:

The U.S. Department of Agriculture recommends the following dietary guidelines for managing a healthy diet: eat a variety of foods; maintain a healthy weight; choose a diet low in total fat with plenty of fruits, vegetables, and grain products; limit the use of sugar, salt, and sodium; and minimize alcoholic beverage consumption.

### Screening:

Early detection is extremely important for those cancers that can be cured and which can be discovered early. Breast cancer is a good example of this, as stage at diagnosis is the strongest predictor for survival from breast cancer.

## FOR MORE INFORMATION

Cancer Data Registry of Idaho  
615 N. 7<sup>th</sup> Street  
P.O. Box 1278  
Boise, ID 83701  
208-338-5100 Ext. 213  
<http://www.idcancer.org>

National Cancer Institute  
Cancer Information Services  
1-800-4CANCER  
<http://cis.nci.nih.gov>

American Cancer Society  
2676 South Vista Avenue  
Boise, ID 83705  
208-343-4609  
<http://www.cancer.org>

## CANCER INCIDENCE 2003-2007

During the five-year period 2003-2007, 31,924 cases of invasive cancer were diagnosed among residents of the state of Idaho, 246 among Owyhee County residents. It is estimated that almost one in two Idahoans will develop cancer during their lifetime.

Cancer Incidence 2003-2007	Owyhee County	State of Idaho
<b>All Sites/Types</b>	<b>246</b>	<b>31,924</b>
<b>Prostate</b>	<b>40</b>	<b>5,357</b>
<b>Female Breast</b>	<b>24</b>	<b>4,219</b>
<b>Lung &amp; Bronchus</b>	<b>39</b>	<b>3,906</b>
<b>Colorectal</b>	<b>21</b>	<b>2,935</b>

The table, *CANCER INCIDENCE 2003-2007, COMPARISON BETWEEN OWYHEE COUNTY AND THE REMAINDER OF THE STATE OF IDAHO*, shows for Owyhee County the number of observed cases, person-years, crude rates, age and sex-adjusted rates, expected number of cases based upon age and sex-specific rates in the remainder of Idaho, and p-values for tests comparing the number of observed and expected cases. The table also shows the number of observed cases, person-years, and crude rates for the remainder of the state of Idaho.

Comparisons were made for all cancers combined, 23 invasive cancer types, in situ breast cancer, non-malignant brain and other central nervous system tumors and pediatric cancer. Separate comparisons for males, females, and both sexes combined are included.

As the table shows, the crude rate of invasive cancer incidence in Owyhee County was 457.5 cases per 100,000 person-years for the years 2003-2007. Compared with the crude incidence rate for the remainder of Idaho (447.4), this gives an estimate of the burden of disease in Owyhee County.

The age- and sex-adjusted incidence rate of invasive cancer in Owyhee County, all sites combined, was 426.9 cases per 100,000 persons per year for the years 2003-2007. There were fewer cases of cancer in Owyhee County (246) than expected (257.8) based upon rates in the remainder of the state, but the difference was not statistically significant.

There are many reasons why cancer incidence rates differ by county, related to smoking, other personal behaviors, socioeconomic status, and other factors.

## CANCER MORTALITY 2004-2008

Cancer is the second leading cause of deaths in Idaho and in the United States. From 2004-2008, 11,781 persons in Idaho died from cancer, 103 in Owyhee County. The majority of cancer deaths are from four primary sites: lung, colon, female breast, and prostate.

Mortality 2004-2008	Owyhee County	State of Idaho
<b>All Deaths</b>	<b>420</b>	<b>52,819</b>
<b>Cancer Deaths % of All Deaths</b>	<b>103 24.5%</b>	<b>11,781 22.3%</b>
<b>Lung &amp; Bronchus</b>	<b>27</b>	<b>2,962</b>
<b>Colorectal</b>	<b>7</b>	<b>1,035</b>
<b>Female Breast</b>	<b>9</b>	<b>809</b>
<b>Prostate</b>	<b>6</b>	<b>777</b>

The table, *CANCER MORTALITY 2004-2008, COMPARISON BETWEEN OWYHEE COUNTY AND THE REMAINDER OF THE STATE OF IDAHO*, shows for Owyhee County the number of observed deaths, person-years, crude rates, age and sex-adjusted rates, expected number of deaths based upon age and sex-specific rates in the remainder of Idaho, and p-values for tests comparing the number of observed and expected deaths. The table also shows the number of observed deaths, person-years, and crude rates for the remainder of the state of Idaho. Comparisons were made for all deaths, all cancer deaths, and 21 specific cancer types. Separate comparisons for males, females, and both sexes combined are included.

The age- and sex-adjusted cancer mortality rate for Owyhee County, all sites combined, was 176.5 deaths per 100,000 persons per year for the years 2004-2008, compared with 161.3 for the remainder of the state. There were more cancer deaths in Owyhee County (103) than expected (94.1) based upon rates in the remainder of the state, but the difference was not statistically significant.

**Statistical Note:** Rates and percentages based upon 12 or fewer cases or deaths (numerator) should be interpreted with caution.

**Data Note:** Mortality data may differ slightly from published official statistics from the Bureau of Vital Records and Health Statistics.

**CANCER INCIDENCE 2003-2007**  
**COMPARISON BETWEEN OWYHEE COUNTY AND THE REMAINDER OF THE STATE OF IDAHO**

Cancer Site/Type	Sex	Owyhee County						Remainder of Idaho		
		Observed Cases	Person Years	Crude Rate (1)	A.A.I. Rate (1,2)	Expected Cases (3)	P-Value (4)	Observed Cases	Person Years	Crude Rate (1)
All Sites Combined	Total	246	53,775	457.5	426.9	257.8	0.484	31,678	7,081,019	447.4
All Sites Combined	Male	137	28,290	484.3	452.8	144.9	0.543	17,047	3,559,023	479.0
All Sites Combined	Female	109	25,485	427.7	396.8	114.1	0.676	14,631	3,521,996	415.4
Bladder	Total	10	53,775	18.6	17.0	11.9	0.719	1,430	7,081,019	20.2
Bladder	Male	7	28,290	24.7	22.6	9.5	0.531	1,096	3,559,023	30.8
Bladder	Female	3	25,485	11.8	10.7	2.7	0.998	334	3,521,996	9.5
Brain - malignant	Total	2	53,775	3.7	3.6	3.9	0.520	491	7,081,019	6.9
Brain - malignant	Male	2	28,290	7.1	6.9	2.1	1.000	263	3,559,023	7.4
Brain - malignant	Female	-	25,485	-	-	1.7	0.351	228	3,521,996	6.5
Brain and other CNS - non-malignant	Total	3	53,775	5.6	5.3	4.9	0.565	612	7,081,019	8.6
Brain and other CNS - non-malignant	Male	1	28,290	3.5	3.4	1.4	1.000	175	3,559,023	4.9
Brain and other CNS - non-malignant	Female	2	25,485	7.8	7.4	3.4	0.692	437	3,521,996	12.4
Breast	Total	24	53,775	44.6	42.3	34.1	0.090	4,250	7,081,019	60.0
Breast	Male	-	28,290	-	-	0.5	1.000	55	3,559,023	1.5
Breast	Female	24	25,485	94.2	87.6	32.6	0.144	4,195	3,521,996	119.1
Breast - in situ	Total	5	53,775	9.3	8.9	6.8	0.654	859	7,081,019	12.1
Breast - in situ	Male	-	28,290	-	-	0.0	1.000	4	3,559,023	0.1
Breast - in situ	Female	5	25,485	19.6	18.4	6.6	0.715	855	3,521,996	24.3
Cervix	Female	3	25,485	11.8	11.8	1.6	0.429	220	3,521,996	6.2
Colorectal	Total	21	53,775	39.1	36.1	24.0	0.634	2,914	7,081,019	41.2
Colorectal	Male	13	28,290	46.0	42.6	12.9	1.000	1,501	3,559,023	42.2
Colorectal	Female	8	25,485	31.4	28.7	11.2	0.430	1,413	3,521,996	40.1
Corpus Uteri	Female	4	25,485	15.7	14.5	6.1	0.557	772	3,521,996	21.9
Esophagus	Total	3	53,775	5.6	5.2	2.7	1.000	333	7,081,019	4.7
Esophagus	Male	3	28,290	10.6	10.0	2.3	0.828	276	3,559,023	7.8
Esophagus	Female	-	25,485	-	-	0.5	1.000	57	3,521,996	1.6
Hodgkin Lymphoma	Total	-	53,775	-	-	1.4	0.488	190	7,081,019	2.7
Hodgkin Lymphoma	Male	-	28,290	-	-	0.7	0.976	90	3,559,023	2.5
Hodgkin Lymphoma	Female	-	25,485	-	-	0.7	1.000	100	3,521,996	2.8
Kidney and Renal Pelvis	Total	9	53,775	16.7	15.7	7.7	0.739	955	7,081,019	13.5
Kidney and Renal Pelvis	Male	5	28,290	17.7	16.9	5.0	1.000	599	3,559,023	16.8
Kidney and Renal Pelvis	Female	4	25,485	15.7	14.5	2.8	0.614	356	3,521,996	10.1
Larynx	Total	2	53,775	3.7	3.5	1.7	1.000	212	7,081,019	3.0
Larynx	Male	2	28,290	7.1	6.7	1.4	0.813	167	3,559,023	4.7
Larynx	Female	-	25,485	-	-	0.4	1.000	45	3,521,996	1.3
Leukemia	Total	6	53,775	11.2	10.4	8.1	0.613	993	7,081,019	14.0
Leukemia	Male	3	28,290	10.6	9.9	4.9	0.546	582	3,559,023	16.4
Leukemia	Female	3	25,485	11.8	11.0	3.2	1.000	411	3,521,996	11.7
Liver and Bile Duct	Total	1	53,775	1.9	1.7	2.2	0.687	278	7,081,019	3.9
Liver and Bile Duct	Male	1	28,290	3.5	3.4	1.6	1.000	193	3,559,023	5.4
Liver and Bile Duct	Female	-	25,485	-	-	0.7	1.000	85	3,521,996	2.4
Lung and Bronchus	Total	39	53,775	72.5	66.0	32.3	0.274	3,867	7,081,019	54.6
Lung and Bronchus	Male	26	28,290	91.9	84.2	18.2	0.098	2,094	3,559,023	58.8
Lung and Bronchus	Female	13	25,485	51.0	45.7	14.3	0.861	1,773	3,521,996	50.3
Melanoma of the Skin	Total	9	53,775	16.7	16.1	13.2	0.306	1,672	7,081,019	23.6
Melanoma of the Skin	Male	2	28,290	7.1	6.8	8.2	0.024 <<	983	3,559,023	27.6
Melanoma of the Skin	Female	7	25,485	27.5	26.8	5.1	0.509	689	3,521,996	19.6
Myeloma	Total	3	53,775	5.6	5.1	3.0	1.000	362	7,081,019	5.1
Myeloma	Male	2	28,290	7.1	6.6	1.9	1.000	223	3,559,023	6.3
Myeloma	Female	1	25,485	3.9	3.5	1.1	1.000	139	3,521,996	3.9
Non-Hodgkin Lymphoma	Total	8	53,775	14.9	13.8	10.7	0.511	1,315	7,081,019	18.6
Non-Hodgkin Lymphoma	Male	4	28,290	14.1	13.3	5.9	0.609	692	3,559,023	19.4
Non-Hodgkin Lymphoma	Female	4	25,485	15.7	14.3	4.9	0.902	623	3,521,996	17.7
Oral Cavity and Pharynx	Total	9	53,775	16.7	15.8	6.1	0.327	760	7,081,019	10.7
Oral Cavity and Pharynx	Male	7	28,290	24.7	23.9	4.5	0.345	549	3,559,023	15.4
Oral Cavity and Pharynx	Female	2	25,485	7.8	7.3	1.6	0.979	211	3,521,996	6.0
Ovary	Female	5	25,485	19.6	18.1	3.7	0.607	466	3,521,996	13.2
Pancreas	Total	12	53,775	22.3	20.5	6.7	0.081	810	7,081,019	11.4
Pancreas	Male	8	28,290	28.3	26.3	3.5	0.055	412	3,559,023	11.6
Pancreas	Female	4	25,485	15.7	14.3	3.2	0.782	398	3,521,996	11.3
Prostate	Male	40	28,290	141.4	131.6	45.4	0.472	5,317	3,559,023	149.4
Stomach	Total	3	53,775	5.6	5.2	2.8	1.000	349	7,081,019	4.9
Stomach	Male	2	28,290	7.1	6.6	2.0	1.000	240	3,559,023	6.7
Stomach	Female	1	25,485	3.9	3.6	0.9	1.000	109	3,521,996	3.1
Testis	Male	1	28,290	3.5	3.6	1.8	0.951	228	3,559,023	6.4
Thyroid	Total	7	53,775	13.0	13.1	6.7	1.000	889	7,081,019	12.6
Thyroid	Male	1	28,290	3.5	3.5	1.5	1.000	189	3,559,023	5.3
Thyroid	Female	6	25,485	23.5	23.9	5.0	0.765	700	3,521,996	19.9
Pediatric Age 0 to 19	Total	4	17,156	23.3	23.6	3.1	0.767	397	2,144,085	18.5
Pediatric Age 0 to 19	Male	2	9,079	22.0	22.1	1.7	1.000	204	1,095,909	18.6
Pediatric Age 0 to 19	Female	2	8,077	24.8	25.2	1.5	0.860	193	1,048,176	18.4

Notes: 1. Rates are expressed as the number of cases per 100,000 persons per year (person-years).  
2. Age and sex-adjusted incidence (A.A.I.) rates for county use age and sex-specific crude rates for the remainder of the state as standard.  
3. Expected cases are based upon age and sex-specific rates for the remainder of the state of Idaho (compare to observed).  
4. P-values compare observed and expected cases, are two tailed, based upon the Poisson probability distribution.  
"<<" denotes significantly fewer cases observed than expected, ">>" denotes significantly more cases observed than expected (p=.05).

Statistical Note: Rates based upon 12 or fewer cases (numerator) should be interpreted with caution.

**CANCER MORTALITY 2004-2008**  
**COMPARISON BETWEEN OWYHEE COUNTY AND THE REMAINDER OF THE STATE OF IDAHO**

Cause of Death Cancer Site/Type	Sex	Owyhee County						Remainder of Idaho		
		Observed Deaths	Person Years	Crude Rate (1)	A.A.M. Rate (1,2)	Expected Deaths (3)	P-Value (4)	Observed Deaths	Person Years	Crude Rate (1)
All Causes of Death	Total	420	53,789	780.8	727.2	417.9	0.931	52,399	7,241,811	723.6
All Causes of Death	Male	222	28,336	783.5	724.1	223.0	0.980	26,490	3,641,017	727.5
All Causes of Death	Female	198	25,453	777.9	722.0	197.3	0.981	25,909	3,600,794	719.5
All Malignant Cancers	Total	103	53,789	191.5	176.5	94.1	0.386	11,678	7,241,811	161.3
All Malignant Cancers	Male	61	28,336	215.3	198.7	52.0	0.239	6,161	3,641,017	169.2
All Malignant Cancers	Female	42	25,453	165.0	150.2	42.8	0.979	5,517	3,600,794	153.2
Bladder	Total	1	53,789	1.9	1.7	2.5	0.588	302	7,241,811	4.2
Bladder	Male	-	28,336	-	-	1.9	0.287	224	3,641,017	6.2
Bladder	Female	1	25,453	3.9	3.5	0.6	0.915	78	3,600,794	2.2
Brain and Other Nervous System	Total	3	53,789	5.6	5.3	2.9	1.000	373	7,241,811	5.2
Brain and Other Nervous System	Male	1	28,336	3.5	3.4	1.5	1.000	188	3,641,017	5.2
Brain and Other Nervous System	Female	2	25,453	7.9	7.4	1.4	0.815	185	3,600,794	5.1
Breast	Total	9	53,789	16.7	15.6	6.4	0.393	804	7,241,811	11.1
Breast	Male	-	28,336	-	-	0.0	1.000	4	3,641,017	0.1
Breast	Female	9	25,453	35.4	32.5	6.2	0.338	800	3,600,794	22.2
Cervix	Female	1	25,453	3.9	3.7	0.5	0.836	73	3,600,794	2.0
Colorectal	Total	7	53,789	13.0	12.0	8.3	0.827	1,028	7,241,811	14.2
Colorectal	Male	4	28,336	14.1	13.0	4.2	1.000	495	3,641,017	13.6
Colorectal	Female	3	25,453	11.8	10.8	4.1	0.820	533	3,600,794	14.8
Corpus Uteri	Female	-	25,453	-	-	0.6	1.000	80	3,600,794	2.2
Esophagus	Total	1	53,789	1.9	1.7	2.5	0.557	318	7,241,811	4.4
Esophagus	Male	1	28,336	3.5	3.3	2.1	0.738	260	3,641,017	7.1
Esophagus	Female	-	25,453	-	-	0.5	1.000	58	3,600,794	1.6
Hodgkin Lymphoma	Total	-	53,789	-	-	0.2	1.000	29	7,241,811	0.4
Hodgkin Lymphoma	Male	-	28,336	-	-	0.1	1.000	13	3,641,017	0.4
Hodgkin Lymphoma	Female	-	25,453	-	-	0.1	1.000	16	3,600,794	0.4
Kidney	Total	2	53,789	3.7	3.4	2.2	1.000	280	7,241,811	3.9
Kidney	Male	2	28,336	7.1	6.6	1.4	0.813	168	3,641,017	4.6
Kidney	Female	-	25,453	-	-	0.9	0.839	112	3,600,794	3.1
Larynx	Total	1	53,789	1.9	1.7	0.5	0.732	57	7,241,811	0.8
Larynx	Male	1	28,336	3.5	3.3	0.4	0.618	45	3,641,017	1.2
Larynx	Female	-	25,453	-	-	0.1	1.000	12	3,600,794	0.3
Leukemia	Total	2	53,789	3.7	3.4	4.4	0.368	547	7,241,811	7.6
Leukemia	Male	-	28,336	-	-	2.6	0.155	301	3,641,017	8.3
Leukemia	Female	2	25,453	7.9	7.3	1.9	1.000	246	3,600,794	6.8
Liver and Bile Duct	Total	3	53,789	5.6	5.2	2.2	0.750	276	7,241,811	3.8
Liver and Bile Duct	Male	1	28,336	3.5	3.4	1.6	1.000	192	3,641,017	5.3
Liver and Bile Duct	Female	2	25,453	7.9	7.1	0.7	0.283	84	3,600,794	2.3
Lung and Bronchus	Total	27	53,789	50.2	45.8	23.9	0.574	2,935	7,241,811	40.5
Lung and Bronchus	Male	17	28,336	60.0	55.2	13.8	0.452	1,631	3,641,017	44.8
Lung and Bronchus	Female	10	25,453	39.3	35.3	10.3	1.000	1,304	3,600,794	36.2
Melanoma of the Skin	Total	4	53,789	7.4	7.0	1.8	0.205	222	7,241,811	3.1
Melanoma of the Skin	Male	2	28,336	7.1	6.6	1.3	0.728	154	3,641,017	4.2
Melanoma of the Skin	Female	2	25,453	7.9	7.3	0.5	0.190	68	3,600,794	1.9
Myeloma	Total	1	53,789	1.9	1.7	2.0	0.793	250	7,241,811	3.5
Myeloma	Male	1	28,336	3.5	3.2	1.2	1.000	145	3,641,017	4.0
Myeloma	Female	-	25,453	-	-	0.8	0.866	105	3,600,794	2.9
Non-Hodgkin Lymphoma	Total	3	53,789	5.6	5.1	3.9	0.921	477	7,241,811	6.6
Non-Hodgkin Lymphoma	Male	1	28,336	3.5	3.3	2.2	0.724	257	3,641,017	7.1
Non-Hodgkin Lymphoma	Female	2	25,453	7.9	7.1	1.7	1.000	220	3,600,794	6.1
Oral Cavity and Pharynx	Total	2	53,789	3.7	3.5	1.5	0.852	182	7,241,811	2.5
Oral Cavity and Pharynx	Male	2	28,336	7.1	6.7	1.0	0.514	119	3,641,017	3.3
Oral Cavity and Pharynx	Female	-	25,453	-	-	0.5	1.000	63	3,600,794	1.7
Ovary	Female	1	25,453	3.9	3.6	2.5	0.558	327	3,600,794	9.1
Pancreas	Total	12	53,789	22.3	20.5	6.2	0.049 >>	764	7,241,811	10.5
Pancreas	Male	10	28,336	35.3	33.0	3.1	0.003 >>	367	3,641,017	10.1
Pancreas	Female	2	25,453	7.9	7.1	3.1	0.803	397	3,600,794	11.0
Prostate	Male	6	28,336	21.2	18.9	6.7	0.981	771	3,641,017	21.2
Stomach	Total	2	53,789	3.7	3.4	1.7	1.000	213	7,241,811	2.9
Stomach	Male	1	28,336	3.5	3.3	1.1	1.000	132	3,641,017	3.6
Stomach	Female	1	25,453	3.9	3.6	0.6	0.924	81	3,600,794	2.2

Notes: 1. Rates are expressed as the number of cases per 100,000 persons per year (person-years).

2. Age and sex-adjusted mortality (A.A.M.) rates for county use age and sex-specific crude rates for the remainder of the state as standard.

3. Expected cases are based upon age and sex-specific rates for the remainder of the state of Idaho (compare to observed).

4. P-values compare observed and expected cases, are two tailed, based upon the Poisson probability distribution.

"<<" denotes significantly fewer cases observed than expected, ">>" denotes significantly more cases observed than expected (p=.05).

Statistical Notes: Rates based upon 12 or fewer cases (numerator) should be interpreted with caution.

Mortality statistics presented differ from BVRHS official statistics due to differences in methodology.

Data Source: Bureau of Vital Records and Health Statistics (BVRHS), Division of Health, Idaho Department of Health and Welfare, 2009.

## Cancer Screening and Risk Factors: Behavioral Risk Factor Surveillance System (BRFSS)

The Bureau of Vital Records and Health Statistics (BVRHS), Division of Health, Idaho Department of Health and Welfare, under a cooperative agreement with the Centers for Disease Control and Prevention, has conducted telephone Behavioral Risk Factor Surveys (BRFS) since 1984 of random samples of adult Idahoans to measure population prevalences of risk factors for the major causes of death, including cancer. The BVRHS provided data sets containing BRFSS data from 2000 through 2008 to CDRI staff, who performed the analyses reported in these *County Profiles*. Data were weighted by probability of selection, and poststratified to 2008 Idaho population estimates by age group, sex, and county. Not all questions were asked in all years. Beginning in 2005, the BRFS was offered in both Spanish and English. A minimum of 30 respondents was required to generate county-level statistics. The cancer screening and risk factor measures were selected to assist in monitoring *Comprehensive Cancer Alliance for Idaho* objectives.

### BRFSS: Cancer Screening and Risk Factor Prevalence Estimates, 2000-2008

	State of Idaho	HD 1	HD 2	HD 3	HD 4	HD 5	HD 6	HD 7	Owyhee County
<b>Access to Care</b>									
No Health Insurance, Age <65	19.5%	22.5%	19.6%	24.3%	15.2%	24.7%	16.3%	18.0%	35.2%
<b>Cancer Screening</b>									
Mammogram Past 2 Years, Age 50+	71.8%	71.5%	71.7%	66.7%	78.3%	68.8%	70.9%	67.9%	65.9%
Mammogram and CBE Past 2 Years, Age 40+	62.5%	62.5%	62.4%	58.8%	69.9%	59.1%	58.8%	56.8%	60.3%
Pap Test Past 3 Years, Cervix Intact	80.7%	82.0%	80.6%	81.5%	85.9%	77.2%	77.5%	72.1%	76.8%
Sigmoidoscopy/Colonoscopy Past 5 Years, Age 50+	41.9%	40.4%	47.2%	36.9%	48.4%	39.1%	36.6%	39.0%	32.5%
Prostate-Specific Antigen Test Past 2 Years, Age 50+	64.9%	60.6%	62.6%	62.1%	71.3%	66.9%	62.2%	62.3%	42.6%
<b>Tobacco Use</b>									
Current Smoker	18.8%	21.8%	18.8%	20.7%	18.4%	20.8%	17.0%	13.0%	25.7%
Current Smokeless Tobacco User	4.4%	5.4%	5.6%	4.6%	4.2%	4.8%	3.7%	3.2%	4.5%
<b>Other Cancer-Related</b>									
Sufficient Moderate/Vigorous Physical Activity	58.8%	57.9%	58.9%	55.0%	60.8%	57.9%	58.3%	61.1%	50.9%
Eat 5+ Servings Fruits & Veggies / Day	21.6%	22.0%	22.4%	19.2%	23.0%	22.8%	20.7%	20.4%	14.8%
Neither Obese Nor Overweight (BMI<25.0)	40.1%	39.0%	39.6%	36.4%	42.9%	39.9%	39.0%	41.3%	32.2%
Sunburn in Previous 12 Months	47.3%	45.1%	46.1%	42.1%	47.7%	46.7%	50.0%	54.4%	42.6%
BRFSS Respondents	45,701	6,622	6,523	6,475	6,593	6,514	6,509	6,465	321

### Access to Care

#### Health Insurance – 2000 to 2008

Statewide, 19.5% of adults aged 18-64 reported having no health care coverage. Health care coverage differed significantly by race/ethnicity, with 17.8% of white non-Hispanics, compared to 41.2% of Hispanics and 32.8% of Native Americans, lacking health insurance. Spanish-speaking respondents were significantly more likely to be uninsured (78.6%) than English-speaking respondents (18.6%). Health care coverage differed significantly by age of respondent, with 30.5% of persons aged 18-24, and 13.0% of persons aged 55-64, lacking health insurance. Health care coverage differed significantly by county, with a range of 11.7% (Oneida County) to 35.2% (Owyhee County) lacking health insurance. Counties with higher proportions of uninsured had significantly higher rates of invasive cancer.

### Cancer Screening

#### Mammogram – 2000, 2002, 2004, 2006-2008

Statewide, 71.8% of women aged 50 and older reported having a mammogram in the past 2 years. Mammography rates differed significantly by county, with a range in screening of 50.2% (Butte County) to 85.8% (Teton County). In 2008, Idaho had the 6<sup>th</sup> lowest mammography screening rate among states for women aged 50 and older.

#### Mammogram and CBE – 2000, 2002, 2004, 2006, 2008

Statewide, 62.5% of women aged 40 and older reported having a mammogram and clinical breast exam (CBE) in the past 2 years. Screening rates differed significantly by age of

respondent, with 69.3% of women aged 55-64, but only 50.4% of women aged 40-44, being screened. Mammogram/CBE utilization differed significantly by county, with a range in screening of 42.6% (Butte) to 70.8% (Blaine County).

#### Pap Test – 2000, 2002, 2004, 2006, 2008

Statewide, 80.7% of women aged 18 and older (with intact cervix) reported having a Pap test in the past 3 years. Pap screening differed significantly by age of respondent, with 89.5% of women aged 25-34, but only 62.8% of women aged 65 and older, screened in the past 3 years. Pap screening did not differ significantly by race/ethnicity. Pap screening decreased significantly from 84.1% in 2000 to 77.8% in 2008. Pap screening differed significantly by county, with a range of 58.8% (Madison County) to 90.1% (Blaine County). In 2008, Idaho had the third lowest Pap screening rate among states.

#### Sigmoidoscopy/Colonoscopy – 2001-2002, 2004, 2006-2008

Statewide, 41.9% of adults aged 50 and older reported having a sigmoidoscopy or colonoscopy within the past 5 years. This type of colorectal cancer screening differed significantly by age of respondent, with 26.6% of persons aged 50-54, and 50.9% of persons aged 65 and older being screened. Males (43.4%) were more likely to have been screened than females (40.5%). Persons with health insurance were almost three times more likely to be screened. There was a significant trend by year of survey, from 33.0% in 2001 to 47.1% in 2008. Screening differed significantly by county, with a range of 22.4% (Gem County) to 55.4% (Nez Perce County). In 2008, Idaho ranked 46<sup>th</sup> among states in the percentage of adults aged 50 and older who reported ever having a sigmoidoscopy or colonoscopy.

## Cancer Screening and Risk Factors: Behavioral Risk Factor Surveillance System (BRFSS)

### Prostate-Specific Antigen (PSA) Test – 2001-2002, 2004, 2006, 2008

Statewide, 64.9% of males aged 50 and older reported having a PSA test in the past 2 years to screen for prostate cancer. PSA test utilization differed significantly by age of respondent, with 48.3% of males aged 50-54 and 73.0% of males aged 65 and older screened in the past 2 years. PSA test utilization differed significantly by race/ethnicity, with 65.4% of white non-Hispanics, compared to 50.9% of Hispanics and 50.6% of Native Americans, screened in the past 2 years. In 2008, Idaho ranked 35th among states (1st = highest) in the proportion of males aged 40+ who had a PSA test within the past two years.

### **Tobacco Use**

#### Current Smoking – 2000 to 2008

Statewide, 18.8% of adults aged 18 and older were current smokers. Smoking prevalence differed significantly by age of respondent, with 22.8% of persons aged 18-24, and 9.0% of persons aged 65 and older reporting current smoking. About twenty percent of males (20.1%) and 17.4% of females were current smokers, and smoking prevalence was lower among white non-Hispanics (18.3%) than among Native Americans (37.8%). There was a significant trend by year of survey, with lower smoking rates in more recent years. Smoking prevalence differed significantly by county, with a range of 3.7% (Madison County) to 26.1% (Shoshone County). Counties with higher rates of current smoking had significantly higher rates of lung cancer.

#### Smokeless Tobacco Use – 2000-2001, 2003-2006

Statewide, 4.4% of adults aged 18 and older were current users of smokeless tobacco. Smokeless tobacco use differed significantly by race/ethnicity, ranging from 2.1% among Hispanics to 8.5% among Native Americans. Smokeless tobacco use differed significantly by age group, ranging from 6.9% of persons aged 25-34 to 1.4% of persons aged 65 and older. Almost nine percent of males (8.6%) and 0.2% of females were current users of smokeless tobacco. There was no significant trend by year of survey. Smokeless tobacco use differed significantly by county, with a range of 0.7% (Madison County) to 20.1% (Camas County).

### **Other Cancer-Related**

#### Physical Activity – 2001, 2003, 2005

Statewide, 58.8% of adults aged 18 and older exercised the recommended amount (30 minutes or more per day of moderate physical activity on 5 or more days per week or 20 minutes or more of vigorous physical activity on 3 or more days per week). White non-Hispanics (59.3%) were more likely to exercise the recommended amount than Hispanics (51.2%). Physical activity differed significantly by age of respondent, with 67.9% of persons aged 18-24, but only 47.4% of persons aged 65+, exercising the recommended amount. Males (61.4%) were significantly more likely to exercise the recommended amount than females (56.2%). Physical activity differed significantly by county, with a range of 49.1% (Idaho County) to 81.6% (Valley County) exercising the recommended amount.

Fruit & Vegetable Consumption – 2000, 2002-2003, 2005, 2007 Statewide, 21.6% of adults aged 18 and older reported eating 5 or more servings of fruits and vegetables per day. Fruit and vegetable consumption differed significantly by race/ethnicity, with 19.2% of Hispanics and 33.4% of Native Americans eating 5 or more servings per day. Males (16.4%) were significantly less likely to eat 5-a-day than females (26.9%). 5-a-day consumption differed significantly by age of respondent, with 17.7% of persons aged 18-24, and 30.9% of persons aged 65+ eating 5-a-day. 5-a-day consumption differed significantly by county, with a range of 14.8% (Owyhee County) to 30.7% (Camas County).

#### Body Mass Index – 2000 to 2008

Statewide, 40.1% of adults aged 18 and older were neither obese nor overweight as measured by body mass index (BMI <25). BMI differed significantly by race/ethnicity, with 40.4% of white non-Hispanics, compared to 35.6% of Hispanics and 32.0% of Native Americans, being neither obese nor overweight. Males (32.1%) were significantly less likely to have the recommended BMI than females (48.6%). BMI differed significantly by age of respondent, with 63.1% of persons aged 18-24, and 29.3% of persons aged 55-64, being neither obese nor overweight. BMI increased at a dramatic rate in Idaho, with 46.2% of adults in 2000 compared to 35.9% in 2008 being neither obese nor overweight. BMI differed significantly by county, with a range of 30.8% (Lewis County) to 57.7% (Blaine County) being neither obese nor overweight. Counties with higher rates of recommended BMI (neither obese nor overweight) had significantly lower rates of colorectal cancer.

#### Sun Exposure – 2003-2004, 2008

Statewide, 47.3% of adults aged 18 and older reported having sunburn in the past 12 months. Sunburn rates were higher for white non-Hispanics (48.8%) than for Hispanics (30.4%) or Native Americans (44.9%). Males (52.3%) were significantly more likely than females (42.5%) to have had sunburn in the past 12 months. Sunburn rates differed significantly by age group, with 69.3% of persons aged 18-24 and 13.8% of persons aged 65 and older having sunburn in the past 12 months. Sunburn rates differed significantly by county, with a range of 23.7% (Butte County) to 65.0% (Teton County) having sunburn in the past 12 months.

