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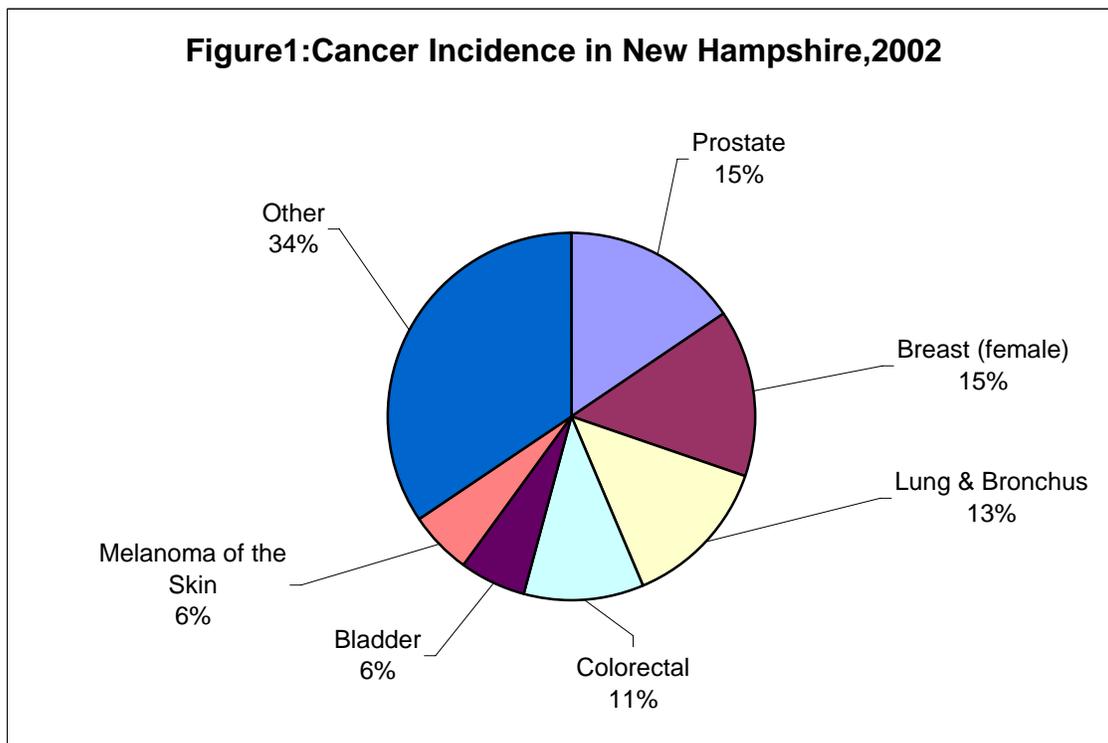
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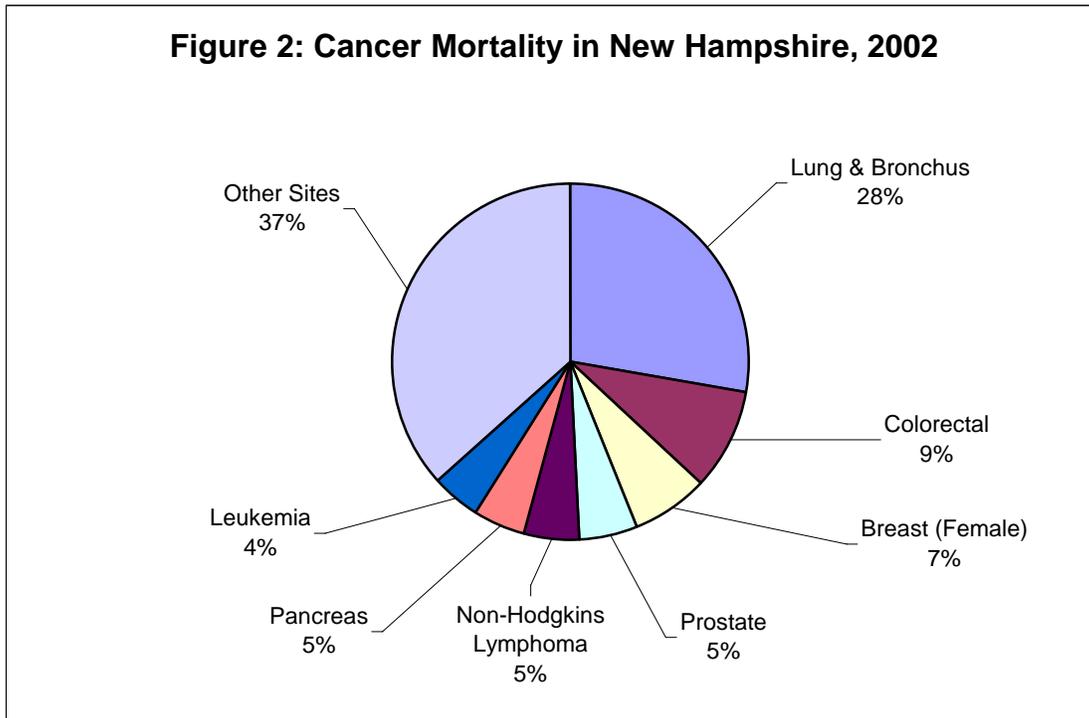
### Burden of Cancer in New Hampshire in 2002

The tables and graphs in this report provide significant insight into the information available regarding both cancer incidence and mortality in New Hampshire. The information presented is based on a consideration of data users' needs and a desire to provide information that is useful to the majority of readers. This cancer report is designed to serve as a tool for understanding cancer in New Hampshire and should assist future investigations of cancer in the state.

In 2002, there were 6663 new cases of cancer (cancer incidence) among New Hampshire residents. As indicated in the chart below, the top 5 types of cancer diagnosed were female breast cancer (15% of all cancer cases), prostate cancer (15%), lung cancer (13%), colorectal cancer (11%), and bladder cancer (6%).



Cancer is the second leading cause of death in New Hampshire, second only to heart disease. Among New Hampshire residents, there were 2,526 deaths due to cancer in 2002. Of these, deaths due to lung cancer were the most common, accounting for 28% of cancer mortality (or cancer deaths). Colorectal cancer (9%), female breast cancer (7%), pancreatic cancer (5%), Non-Hodgkin's Lymphoma (5%) and prostate cancer (5%) round out the top causes of cancer mortality, as shown in the chart provided. These six cancer types accounted for 59% of all cancer deaths.



## Cancer Prevention: Focus on Behaviors

Cancer prevention discussions typically focus on determining what steps people can take to reduce their risk of developing cancer. A wide variety of behaviors have been identified as potential risk factors for cancer, or actions that increase the chance of developing disease.

### *Tobacco*

Tobacco use is considered one of the most commonly cited risk factors for many cancers, including lung, throat, nasal, oral cavity & pharynx, larynx, esophagus, stomach, liver, pancreas, kidney, bladder, uterine cancer and also myeloid leukemia. There is strong evidence of the link between smoking and the development of lung cancer. The American Cancer Society estimates that 30% of all cancer deaths and 87% of all cases of lung cancer deaths can be attributed to tobacco. Lung cancer is second to breast cancer as the most frequently diagnosed cancer in New Hampshire in 2002 and was the leading cause of cancer death that year.



The Behavioral Risk Factor Surveillance System (BRFSS), a random telephone-based survey of adults, showed that 23% of NH adults reported being current cigarette smokers in 2002.

### *Eating Habits and Exercise*

To reduce the risk of developing colorectal cancer, a cancer in the top 5 leading causes of cancer incidence and mortality, the American Cancer Society recommends eating a diet rich in fruits and vegetables and exercising regularly. However, BRFSS data from 2002 indicated that 72% of NH adults did not eat the recommended 5 servings of fruit and vegetables a day and 20% do not participate in leisure time physical activity.

## **Preventing Cancer Mortality: Focus on Screening**

While preventing cancer through behavior modification is a major step in reducing the burden of cancer incidence, screening is an extremely important method of reducing cancer mortality. For certain types of cancer, screening tests that can detect cancer at an early stage - when treatment is highly effective - are available and are recommended for certain individuals. For example, of the top five causes of cancer deaths listed above, screening for breast cancer through regular mammography, colorectal cancer through sigmoidoscopy or colonoscopy, and prostate cancer by detection of PSA are well-established procedures. However, data from the 2002 BRFSS indicate that these tests are under utilized in New Hampshire.

- 60% of NH adults aged 50 or older did not have a blood stool test within past 2 years.
- 50% of NH adults aged 50 and older have never had a sigmoidoscopy or colonoscopy.
- 20% of NH women aged 50 and older had not had a mammogram in the past 2 years.
- 47% of NH men aged 40 and older have never had a PSA test.

## **Statewide Objectives for Reducing Cancer in New Hampshire**



Because cancer is a demonstrated public health problem in terms of incidence, mortality, screening, and prevention, the State of New Hampshire included objectives to address the burden of cancer in Healthy New Hampshire 2010 (HNNH2010), a document describing future benchmarks for improvements to health. Within HNNH2010, the following objectives have been established:

- Reduce breast cancer deaths (per 100,000 population) to 26.0 by 2010.

- Reduce colorectal cancer deaths (per 100,000 population) to 21.0 by 2010.
- Increase the percentage of persons who engage in physical activity for thirty minutes or more five or more times a week to 50% by 2010.
- Increase the percentage of persons who consume 5 or more servings of fruits and vegetables daily to 50% by 2010.
- Increase the percentage of youth who report never using tobacco to 43% by 2010.

## Overview of Cancer Incidence and Mortality

The tables below quantitatively define the burden of cancer in New Hampshire. Each of 23 selected cancer sites, including lung, breast, prostate, and colorectal cancers, are analyzed. This section includes:

- Analysis of cancer incidence and mortality counts by sex at the state level.
- Age-adjusted cancer incidence and mortality rates by sex at the state level.

**Table1: Cancer Incidence, Rates and 95% Confidence Intervals by Sex, 2002**

Cancer Site	Female				Male				Total			
	Count	Rate	95% Conf Int		Count	Rate	95% Conf Int		Count	Rate	95% Conf Int	
			Low	High			Low	High			Low	High
Bladder	101	14.3	11.5	17.1	280	51.8	45.6	58.0	381	29.9	26.9	33.0
Brain & other CNS	39	5.8	4.2	8.0	46	7.4	5.4	9.9	85	6.6	5.3	8.1
Breast (female)	982	137.8	129.1	146.4								
Cervical	53	7.7	5.8	10.1								
Colorectal	362	50.1	44.9	55.3	351	62.6	55.9	69.3	713	55.5	51.4	59.6
Esophagus	19	2.5	1.5	4.0	80	13.7	10.9	17.1	99	7.6	6.2	9.3
Hodgkin's Disease	23	3.6	2.3	5.3	30	4.8	3.2	6.8	53	4.2	3.1	5.5
Kidney & Renal Pelvis	61	8.8	6.7	11.3	99	16.4	13.4	20.0	160	12.2	10.3	14.1
Larynx	9	1.3	0.6	2.5	39	6.6	4.7	9.0	48	3.7	2.8	4.9
Leukemia	57	8.1	6.2	10.5	112	20.0	16.2	23.8	169	13.2	11.2	15.3
Liver	17	2.3	1.4	3.7	35	6.1	4.2	8.4	52	4.1	3.1	5.4
Lung & Bronchus	429	61.0	55.2	66.8	443	79.3	71.8	86.9	872	68.3	63.8	72.8
Melanoma of the Skin	161	23.8	20.1	27.5	210	34.8	30.0	39.6	371	28.4	25.5	31.3
Multiple Myeloma	41	5.7	4.1	7.7	31	5.6	3.8	8.0	72	5.7	4.4	7.2
Non-Hodgkin's Lymphoma	117	16.3	13.4	19.3	126	21.6	17.8	25.5	243	18.7	16.4	21.1
Oral Cavity & Pharynx	50	7.3	5.4	9.6	93	15.1	12.2	18.6	143	10.8	9.0	12.6
Ovary	84	11.8	9.4	14.6								
Pancreas	72	10.1	7.9	12.7	64	11.8	9.1	15.0	136	10.6	8.8	12.4
Prostate					1043	178.7	167.6	189.7				
Stomach	17	2.4	1.4	3.9	40	7.0	5.0	9.6	57	4.4	3.4	5.7
Testis					36	5.8	4.1	8.0				
Thyroid	70	10.4	8.1	13.1	21	3.3	2.1	5.1	91	6.9	5.6	8.5
Uterine	190	27.2	23.3	31.1								
Total Invasive Cancers	3201	452.4	436.7	468.2	3454	600.6	580.2	621.1	6663	513.7	501.3	526.0

Table 1 shows the counts of newly diagnosed cancer cases for New Hampshire residents in the year 2002. The table also includes the age-adjusted rates and 95% confidence intervals. (Data Provided by New Hampshire State Cancer Registry and the Health Statistics and Data Management Section of the Bureau of Disease Control and Health Statistics)

**Table 2: Cancer Deaths, Rates and 95% Confidence Intervals by Sex, 2002**

Cancer Site	Female				Male				Total			
	Counts	Rate	95% Conf Int		Counts	Rate	95% Conf Int		Counts	Rate	95% Conf Int	
			Low	High			Low	High			Low	High
Bladder	17	2.3	1.3	3.6	47	9.4	6.9	12.5	64	5.1	3.9	6.5
Brain & other CNS	27	3.9	2.6	5.7	44	7.1	5.2	9.6	71	5.5	4.3	6.9
Breast (Female)	175	23.8	20.2	27.3								
Cervical	16	2.3	1.3	3.7								
Colorectal	110	15.0	12.1	17.8	119	22.5	18.4	26.7	229	17.9	15.6	20.2
Esophagus	12	1.6	0.8	2.8	62	10.8	8.3	13.9	74	5.7	4.5	7.2
Hodgkin's Disease	2	0.3	0.0	1.0	3	0.4	0.1	1.3	5	0.4	0.1	0.9
Kidney & Renal Pelvis	23	3.1	2.0	4.7	23	4.2	2.7	6.4	46	3.6	2.6	4.8
Larynx	3	0.4	0.1	1.3	6	1.1	0.4	2.3	9	0.7	0.3	1.3
Leukemia	43	5.9	4.3	7.9	69	13.2	10.3	16.7	112	8.8	7.2	10.4
Liver	16	2.1	1.2	3.5	45	7.9	5.8	10.6	61	4.7	3.6	6.1
Lung & Bronchus	341	48.1	43.0	53.3	362	66.4	59.5	73.4	703	55.4	51.3	59.5
Melanoma of the Skin	17	2.4	1.4	3.8	32	5.5	3.7	7.7	49	3.8	2.8	5.1
Multiple Myeloma	23	3.0	1.9	4.5	29	5.3	3.6	7.6	52	4.1	3.1	5.4
Non-Hodgkin's Lymphoma	60	8.2	6.3	10.6	64	12.1	9.3	15.4	124	9.9	8.1	11.6
Oral Cavity & Pharynx	20	2.8	1.7	4.3	30	5.3	3.6	7.6	50	3.9	2.9	5.1
Ovary	65	9.0	6.9	11.5								
Pancreas	61	8.4	6.5	10.8	63	11.6	8.9	14.8	124	9.7	8.0	11.4
Prostate					136	29.8	24.7	34.9				
Stomach	12	1.7	0.9	3.0	33	5.9	4.1	8.3	45	3.5	2.6	4.7
Testis					4	0.6	0.2	1.6				
Thyroid	2	0.3	0.0	1.0	3	0.6	0.1	1.6	5	0.4	0.1	0.9
Uterine	29	4.1	2.7	5.8								
Total Cancers	940	130.6	122.2	139.0	1001	187.3	175.4	199.2	2526	199.4	191.7	207.4

Table 2 shows the counts of deaths due to cancer cases for New Hampshire residents in the year 2002. The table also includes the age adjusted rates and 95% confidence intervals. (Data provided by New Hampshire Bureau of Vital Records and the Health Statistics and Data Management Section of the Bureau of Disease Control and Health Statistics)

To obtain more information about cancer, contact the Bureau of Disease Control and Health Statistics, Department of Health and Human Services, 29 Hazen Drive, Concord, NH 03301, (603) 271-4477 or (800) 852-3345, Ext. 4477, or e-mail [healthstats@dhhs.state.nh.us](mailto:healthstats@dhhs.state.nh.us). Further information, as well as an electronic version of this report, is available on the HSDM web site: <http://www.dhhs.nh.gov/DHHS/HSDM/default.htm>