NEW HAMPSHIRE COMPREHENSIVE CANCER COLLABORATION

VISION STATEMENT: The vision of the New Hampshire Comprehensive Cancer Collaboration is for cancer incidence, morbidity, and mortality to be significantly reduced or eliminated and for the people of New Hampshire to enjoy a healthy quality of life. MISSION STATEMENT: The mission of the Comprehensive Cancer Collaboration is to reduce significantly the incidence of, suffering from, and mortality due to cancer for people in New Hampshire through prevention, early detection, treatment and survivorship, and palliation. We will accomplish this goal by means of an integrated and coordinated alliance of stakeholders that will utilize available epidemiological data and evidence-based research to set priorities for action.

Cancer IN NEW HAMPSHIRE

A CALL TO ACTION
2010

Dedication

To those who have been touched by cancer,
To those who have known the fear and confusion of a diagnosis of cancer,
The discomfort and exhaustion of treatment,
The uncertainty of survivorship,
And the pain and grief of losing a loved one to this disease:

We dedicate this cancer plan to you.

Cancer in New Hampshire

A Call to Action 2010

New Hampshire Comprehensive Cancer Collaboration

Comprehensive Cancer Collaboration Board of Directors 2003-2006

***Lynn Butterly, M.D. (Chair)**
Director, Colorectal Cancer Screening
Dartmouth-Hitchcock Medical Center
Norris Cotton Cancer Center

***Peter Ames, M.P.H.**
Director of Government Relations & Advocacy
American Cancer Society

***Karla Armenti, Sc.D.**
Chief, Health Statistics and Data Management
Division of Public Health Services
NH Department of Health & Human Services

Sandra Buseman, M.D., M.S.P.H.
Former Medical Director
City of Manchester Health Department

***Lisa K. Carlson, M.D., M.P.H.**
Medical Director
City of Manchester Health Department

Rosemary Caron, Ph.D., M.P.H.
(former Co-Chair)
Former Environmental Toxicologist and
Chronic Disease Epidemiologist
City of Manchester Health Department

Andrew Chalsma
Former Health Statistics and Data Management
Section Chief
Division of Public Health Services
NH Department of Health & Human Services

***Yvonne J. Corbeil**
Director for Program and Network Development
for Palliative Care
Dartmouth-Hitchcock Medical Center
Executive Director
New Hampshire Hospice and Palliative Care
Organization

***Sai S. Cherala, M.D., M.P.H.**
Cancer Epidemiologist
Bureau of Disease Control and Health Statistics
Division of Public Health Services
NH Department of Health & Human Services

***Peter Davies**
State Director of Communications
American Cancer Society

***Joanne Gersten, R.N., M.S.**
Vice-President, Cancer Control
American Cancer Society

***Nancy Kane, R.N., M.S., A.O.C.N.**
Program Director
Payson Center for Cancer Care
Concord Hospital

***Kathleen Karwowski, M.P.H.**
Partnership Program Coordinator
National Cancer Institute's Cancer Information
Service of New England

***Shawn LaFrance**
Executive Director
Foundation for Healthy Communities

Robert Lambert, M.D., F.A.C.S.
Former State Chair, American College of Surgeons
Dover Surgical Associates

Louise Malek
Former Vice President, Northern New England
American Cancer Society

***Don McDonah, M.D.**
Family Physician
Medical Director Circle of Life/Palliative Care
St. Joseph Hospital

***Lise Mendham, M.P.H., R.N., O.C.N.**
Director of Oncology
Elliot Hospital

***Lynne Graziano Morin**
Community Outreach Manager
The Leukemia and Lymphoma Society

Marie Mulroy
Former Program Coordinator
Cancer Control and Prevention Program
NH Department of Health & Human Services

***Margaret Murphy**
Section Administrator
Chronic Disease Prevention and Control Section
Division of Public Health Services
NH Department of Health & Human Services

***Nick Perencevich, M.D.**
State Chair, American College of Surgeons
Concord Surgical Associates

***Judy Rees, B.M., B.Ch., Ph.D.**
New Hampshire State Cancer Registry
Dartmouth Medical School

***William Santis, M.D.**
Concord Hospital Urology Group
Payson Center for Cancer Care
Concord Hospital

***William Walker**
Director, Office of Minority Health
NH Department of Health & Human Services

Jody Wilson
Former BRFSS Coordinator
Division of Public Health Services
Health Statistics and Data Management Section
NH Department of Health & Human Services

**Current board member*

Letter from the Governor

December 12, 2005

Dear Friends:

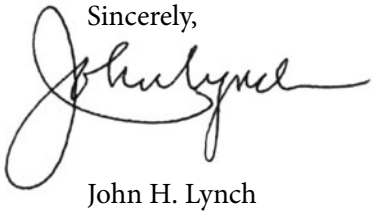
New Hampshire has, for years, been at the forefront of technological advancement and civic involvement through government and volunteerism. Harnessing the skill and compassion of our citizens and the breadth of our technology, we have been able to create the New Hampshire Comprehensive Cancer Plan.

Cancer death rates in New Hampshire continue to fall as they do across the country, but cancer still remains the second leading cause of death in our state. It is estimated that this year approximately 2,620 New Hampshire residents will die from cancer. In addition, 6,310 new cases of cancer will be diagnosed in New Hampshire. The risk of cancer could be prevented through adopting healthy behaviors, or finding cancers at an early stage when the opportunity for the cure is greatest. With an ever-increasing number of cancer patients surviving long-term, it is imperative to understand and meet their physical, emotional, financial, and spiritual needs.

Effective cancer prevention and control requires planning and coordination. More than 100 individuals and organizations came together and volunteered their time and expertise to form the New Hampshire Cancer Control Collaboration. Over a two-year period, the New Hampshire Comprehensive Cancer Plan presented on the following pages was developed. This plan outlines goals, objectives, and strategies to continue the progress in reducing the effects of cancer on all New Hampshire residents. This plan is intended to be a dynamic document used by organizations and communities to create and implement activities to reduce the cancer burden throughout New Hampshire. Continued collaboration among all who are part of the cancer community will be the key to this plan's success.

I look forward to working with the Comprehensive Cancer Collaboration, its partners, affiliated organizations, and the citizens of New Hampshire as together we strive to mitigate the effects of cancer.

Sincerely,



John H. Lynch

JOHN H. LYNCH
Governor

Acknowledgements

We wish to acknowledge and thank the many individuals and organizations that gave so generously of their time and resources developing "Cancer in New Hampshire—A Call to Action 2010." In particular, we are grateful to the American Cancer Society, Dartmouth-Hitchcock Medical Center, Norris Cotton Cancer Center, and the NH Department of Health and Human Services, for their leadership roles in the Comprehensive Cancer Collaboration.

This document is a summary of that work and will set the future direction of cancer prevention and control in New Hampshire.

For electronic copies of this plan, please visit www.cancerplan.org

Table of Contents

Part I

Cancer in New Hampshire

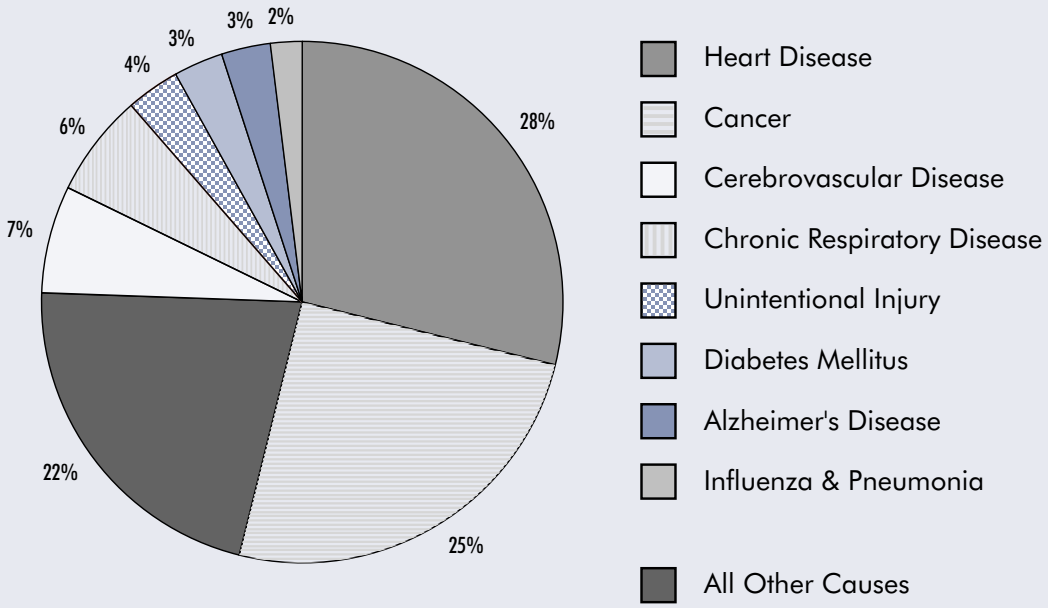
VISION STATEMENT

The vision of the New Hampshire Comprehensive Cancer Collaboration is for cancer incidence, morbidity, and mortality to be significantly reduced or eliminated and for the people of New Hampshire to enjoy a healthy quality of life.

MISSION STATEMENT

The mission of the Comprehensive Cancer Collaboration is to reduce significantly the incidence of, suffering from, and mortality due to cancer for people in New Hampshire through prevention, early detection, treatment and survivorship, and palliation. We will accomplish this goal by means of an integrated and coordinated alliance of stakeholders that will utilize available epidemiological data and evidence-based research to set priorities for action.

Causes of Death in New Hampshire,1999-2001



Data Source: New Hampshire Department of Health and Human Services

Figure 1

Executive Summary

Cancer is a major public health threat in New Hampshire, touching lives in every corner of the state and in every socio-economic group. It is the second leading cause of death across all age groups in New Hampshire and the most common cause of death among adults 35 to 74 years of age[1]. In 2005, approximately 6,310 New Hampshire residents learned they have cancer, while approximately 2,620 people died from the disease[2].

As we move forward through the 21st century, New Hampshire will need to have an infrastructure in place to provide the highest level of resources, both clinical, academic and economic, to prevent, detect and treat cancer. This can only be accomplished if all organizations in New Hampshire that deliver cancer services and all groups involved in cancer prevention and research collaborate to understand and reduce the incidence of, and mortality and morbidity from, this disease.

New Hampshire has embarked on this effort by involving more than one hundred individuals (including cancer survivors) and organizations, now known as the New Hampshire Comprehensive Cancer Collaboration (CCC). The work of the CCC has resulted in the creation of a series of specific goals and objectives for reducing the cancer burden in New Hampshire. This cancer plan considers both the specific nature of the cancer burden in the state and the ways in which cancer experts think it should be addressed effectively.

The Centers for Disease Control and Prevention (CDC) define a comprehensive cancer plan as "an integrated and coordinated approach to reduce cancer incidence, mortality, and morbidity through a continuum of care." This continuum of care approach includes a range of services in the areas of primary prevention, prevention and early detection, treatment and survivorship, and palliation. By assessing how New Hampshire fares in providing this continuum of care, the Comprehensive Cancer Collaboration has set clear priorities for tackling the state's most pressing cancer control needs. The result, as detailed in this plan, will allow New Hampshire to work toward significantly reducing the burden of cancer by 2010.

Development of the Plan

Beginning in October 2003, a group of individuals from 14 organizations representing various aspects of cancer control met to serve as the New Hampshire Comprehensive Cancer Collaboration Steering Committee (now known as the Board of Directors). The initial work focused on establishing the groundwork for the planning process and defining the vision and mission of the Collaboration. A key element of this process was a clear assessment of the cancer control challenges in New Hampshire. By analyzing incidence and mortality rates, as well as the data from the CDC Behavioral Risk Factor Surveillance System (BRFSS), the Steering Committee determined the most important areas for cancer control efforts. The committee decided to focus on the five cancer sites with the greatest impact on incidence and mortality in New Hampshire: breast, colorectal, lung, prostate, and skin. The Steering Committee formed workgroups around each of these cancers. The workgroups were charged with identifying priority objectives in the areas of primary prevention, prevention and early detection, treatment and survivorship, and palliation for their specific cancer site. The Steering Committee also identified goals and objectives for emerging issues in cancer control, and created a data workgroup to supply statistical analysis, as needed.

The culmination of the Steering Committee's groundwork took place on September 10, 2004. One-hundred and twenty participants representing a diverse blend of organizations and individuals across the state attended the initial kickoff meeting of the workgroup process and the New Hampshire Comprehensive Cancer Collaboration became a coordinated alliance of stakeholders.

New Hampshire is fortunate to have a group of national, state and local health organizations, community service organizations, cancer survivors, and individuals dedicated to developing a cancer control plan for New Hampshire. The participants have included a broad spectrum of individuals working with, or affected by, cancer. Physicians, nurses, social workers, therapists, advocates, policy makers, representatives of health plans, survivors, and family members have offered their time and energy to the development of goals and objectives for this plan. Representation has been solicited from every geographic region of the state. A full list of all participants is included on page 44.

The first priority of the Comprehensive Cancer Collaboration was to ensure that the final plan not be simply a report on cancer, but function as a clearly defined action plan to reduce the incidence of, and the morbidity and mortality caused by cancer. To achieve this goal, the plan needs to:

- Achieve consensus on evidence-based goals and objectives to reduce the incidence, morbidity, and mortality caused by cancer;
- Encourage healthy lifestyle behaviors for New Hampshire residents;
- Help people in New Hampshire reduce exposure to cancer risk factors;
- Increase the appropriate utilization of screening services and diagnostic follow-up by New Hampshire residents;
- Improve the quality of life for those with cancer by ensuring that there are cancer services available during and after treatment, regardless of the prognosis;
- Examine system capacity, delivery methods, and best practices for cancer treatment, clinical trials, and therapies;
- Link existing cancer programs and services into a comprehensive framework that will address the needs of people in New Hampshire;

- Maximize existing resources and avoid duplication of services; and
- Increase access to high-quality cancer treatments and services regardless of geographic, cultural, or financial concerns.

In April 2005, after months of meeting in workgroups to identify the goals and objectives that will have the greatest impact on cancer in New Hampshire, the Comprehensive Cancer Collaboration came together to prioritize the selected objectives and to initiate the implementation process. The plan presented here is the blueprint for that process. It spells out the goals and initial objectives and strategies for a comprehensive effort to control cancer and reduce the burden and suffering from this disease in New Hampshire.

Cancer in New Hampshire

The disparity and diversity issues that surround a diagnosis of cancer can be a significant factor in the effective delivery of health care. Not everyone affected by cancer in New Hampshire can or does avail themselves of all of the recommended treatments and services in a timely manner. This may be because of where they live, age, disabilities, lack of transportation, economic, cultural, or language barriers. These barriers may also result in people making prevention or treatment decisions based on factors other than what is considered to be the best evidence-based recommendation. A key goal of the Comprehensive Cancer Collaboration is to better understand these barriers and incorporate that understanding into specific cancer control objectives.

Demographics and Geography

New Hampshire is a state with just more than 1.2 million people, 40.7% of whom reside in areas classified as rural and 59.3% in areas classified as urban[3]. The urban and near urban areas are located in the south-east and south-central parts of the state, while the western, central, and northern portions of the state are all considered primarily rural. New Hampshire's population, although becoming more diverse in recent years, is still largely homogeneous, with 95.5% of residents reported as white[4].

Morbidity and Mortality

In New Hampshire, the rate at which cancer is diagnosed is slightly below the national rate for males and slightly above the national rate for females. Nationally, in the year 2001, for every 100,000 males, 566 were diagnosed with cancer and for every 100,000 females, 420 were diagnosed with cancer[5]. For this same time period in New Hampshire, 555 males per 100,000 and 422 females per 100,000 were diagnosed with cancer[1]. Slightly more males and females per 100,000 population die from cancer in New Hampshire than the national rate. Nationally, among males, 251 per 100,000 annually die from cancer, compared to 257 in New Hampshire[1,5]. Nationally, 167 females per 100,000 die annually from cancer compared with 172 in New Hampshire[1,5]. Lung, colorectal, prostate, and breast cancers accounted for close to 67.1% of cancer diagnoses and 62% of cancer deaths in New Hampshire from 1997 to 2001[1]. During the decade of the 1990s, cancer mortality in New Hampshire declined for three major sites: female breast, prostate, and colorectal. In contrast, there was an increase in lung cancer mortality due to the increase in female lung cancer rates from 35.8 in 1990 to 44.4 in 2001 (per 100,000 population; age-adjusted to the 2000 US population)[1]. Although New Hampshire's overall cancer incidence and mortality have been similar to the national experience in recent years, there are some additional issues that will require special attention.

Diverse and Disparate Populations

The face of New Hampshire is rapidly changing. The influx of new residents from throughout the country and immigrants from all over the world means that we now have a growing multi-cultural population. In the 2000 US census, the population of non-white citizens in Manchester was more than 8%—up two to threefold from decades past. In Nashua, the state's second largest city, 6.2% of the population is now Hispanic. All expectations are for the proportion of non-white citizens to continue growing in New Hampshire.

Because of these recent trends, it is critical that the unequal burden of cancer among minority populations be explored. Nationally, the cancer incidence rate for African American men is 24% greater than for white men[2]. This increased incidence rate is consistent across all major cancers. The African American population joins other minorities, including Asian Americans, American Indians and Latinos, in having higher rates of stomach and liver cancers[2].

The disparity between the white population and minority groups for mortality is even starker. The national cancer death rate for African American men is 41% higher than for white men[2]. The gap between breast cancer mortality rates for white women and African American women is particularly striking. While the incidence rate for women of African descent is 15% lower than for white women, the death rate for African American women is 18% higher than for white women[2]. The New Hampshire minority population may not be large enough to allow reliable analysis of race-specific and ethnic-specific rates to produce similar data, but the national experience suggests that New Hampshire should act in anticipation of the growth of our minority population.

According to the Endowment for Health, "health data specific to minorities residing in New Hampshire is minimal."[6] Thus efforts to assess and address the needs of New Hampshire's minority populations have been hindered. We must be able to articulate the issues and burdens of cancer in specific populations in order to identify the most effective strategies to address them and improve health outcomes. We must continue to strive for culturally and linguistically appropriate health-care services including well trained staff and specific education to cope effectively with cultural differences.

To that end, the New Hampshire Office of Minority Health was created in 1999 to ensure equal access to all health-care services by all the citizens and residents of New Hampshire. In addition, the Diversity Task Force was created by the New Hampshire Office of Minority Health to ensure that multi-cultural and multi-ethnic communities have input into the health-care system as a means of improving services. The task force has identified targets that will help achieve the goal of eliminating health disparities in New Hampshire. One initiative is to improve data on the status of the health of New Hampshire's minority populations, which will be vital to the success of New Hampshire's Comprehensive Cancer Collaboration.

Geographic Disparity

In addition to racial and ethnic disparities, New Hampshire must also address the geographic issues and needs of its rural populations. The state's Rural Health Report for 2004 notes that "access to health care in the rural communities of New Hampshire is a significant issue today."[7] This study found real and significant differences in demographics, health-care access, health-related behavior, and health outcomes for those living in the rural areas of New Hampshire. The most notable differences were:

- Rural residents of New Hampshire are significantly older, poorer, and less educated than non-rural residents. Residents of the most rural areas of New Hampshire are almost 50% more likely to be 65 years of age and older.

- Rural residents were significantly less likely to be insured for health-care services.
- The majority of the uninsured were working, but were either self-employed or working for companies which did not offer health insurance coverage.

The physical distance between people and resources in the rural areas of our state can have a strong impact on the health of the area's residents and the way in which cancer services are delivered. All of these factors speak to the fact that we need to ensure that treatment protocols and needed cancer services accommodate our rural citizens.

The Aging Population

As with the rest of the US population, New Hampshire's population is aging. Both birth and age-adjusted death rates are declining and in 2001, the New Hampshire death rate was lower than the US. In 1990, 11.3 % of New Hampshire's population was aged 65 or older. This rate increased to 12% in 2000, which is slightly lower than the US population rate of 12.4%. The overall female population of the state is larger than the male population and this holds true for the population more than age 65. Fifty eight percent of the population older than 65 is female and 42% percent is male[3, 4]. Females, as a rule, tend to live longer than males.

Targeted Cancer Sites

In its effort to develop the most effective means of alleviating the cancer burden in New Hampshire, the Comprehensive Cancer Collaboration will focus on the five cancer sites which are most common and amenable to intervention; breast, colon, lung, prostate, and skin. The fact that more than half of New Hampshire's recent cancer deaths are attributable to lung, prostate, breast, or colorectal cancers suggests that substantial reductions in the cancer burden could be achieved by lowering smoking rates, improving utilization of mammography, and colorectal screening. Additional reductions in the cancer burden could be realized by modifying other health-risk behaviors through improved nutrition, increased physical activity, avoidance of obesity, and reduction in exposure to ultraviolet light and radon gas.

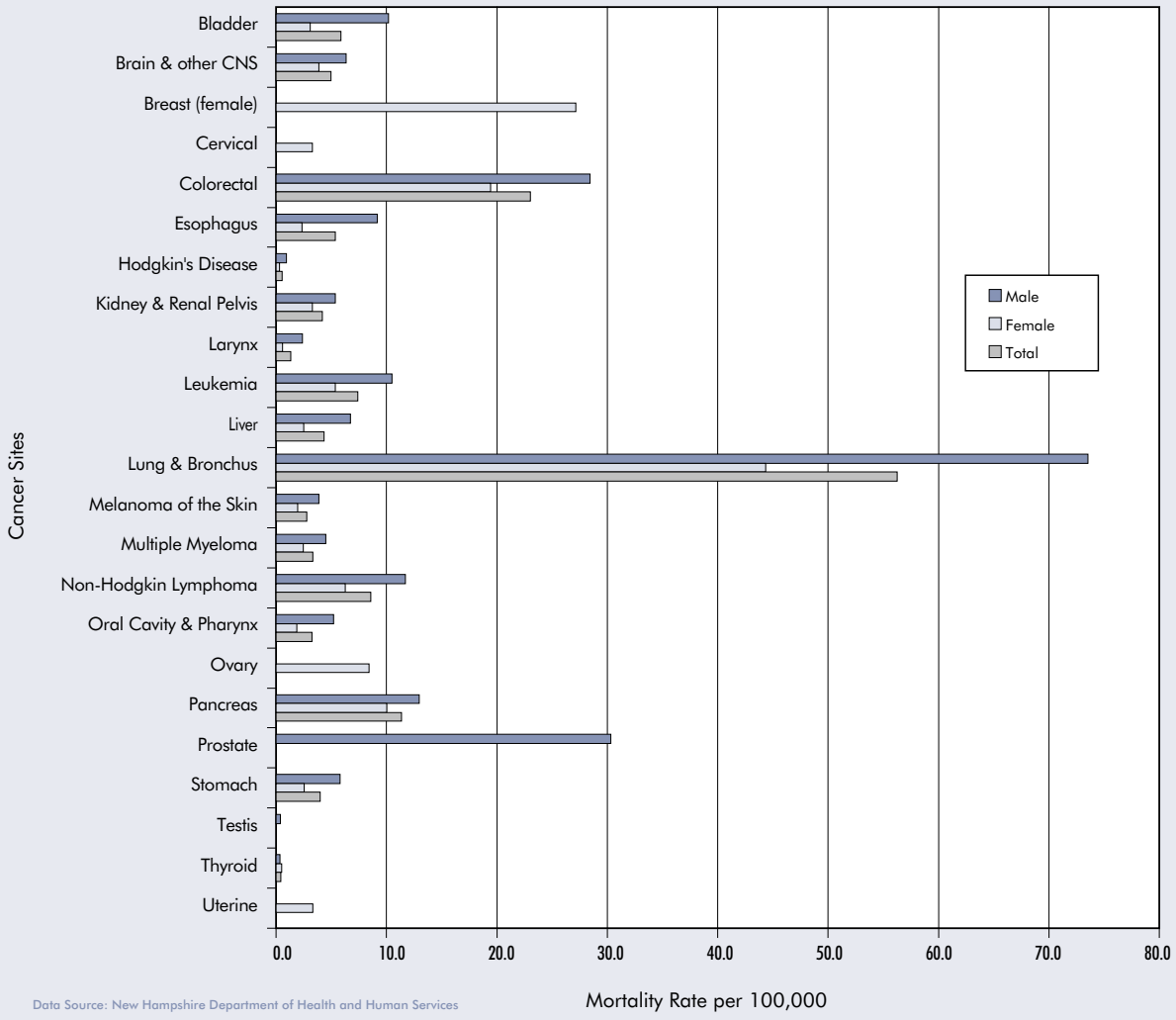
For the period of 1997-2001, the most frequently occurring cancers in males in New Hampshire were prostate, 156 per 100,000, followed by lung, 88 per 100,000, and colorectal, 65 per 100,000[1]. In females, the most frequently occurring cancers were breast cancer 136 per 100,000, followed by lung, 58 per 1000,000, and colorectal, 48 per 100,000[1]. For males and females combined, lung cancer is the most common cancer, followed by colorectal cancer, as shown in Figure 2.

From 1997-2001, lung cancer accounted for about 74 per 100,000 of male cancer deaths and nearly 44 per 100,000 of female cancer deaths in New Hampshire[1]. For females, breast cancer is the second leading cause of cancer mortality, accounting for nearly 27 per 100,000 deaths, while prostate cancer causes the second highest rate of male deaths, at 30 per 100,000[1]. Colorectal cancer is the third leading cause of death in males at 28 per 100,000 and in females at 19 per 100,000, making it the second leading cause of death overall[1].

In addition to their significant place in the total cancer burden of New Hampshire, most of these sites have been targeted because of the significant progress that can be made in controlling them through primary and secondary prevention and early detection. Since 87% of lung cancer deaths and 30% of all cancer deaths are attributable to smoking, successful tobacco control and prevention efforts can have a dramatic effect on New Hampshire's cancer mortality[8].

Successful screening and early detection programs can also make an important difference in outcomes. For example, colorectal cancer offers the opportunity for true prevention by finding and removing potentially pre-cancerous polyps before they can turn into cancer. Furthermore, when colorectal cancers are detected at the early, localized stage, the 5-year survival rate is 90%[2]. Unfortunately, only 39% of colorectal cancers in the US are identified at this stage[2]. By working to increase screening rates for all cancers, particularly for colorectal and breast cancers, a major impact can be realized on New Hampshire's mortality rates.

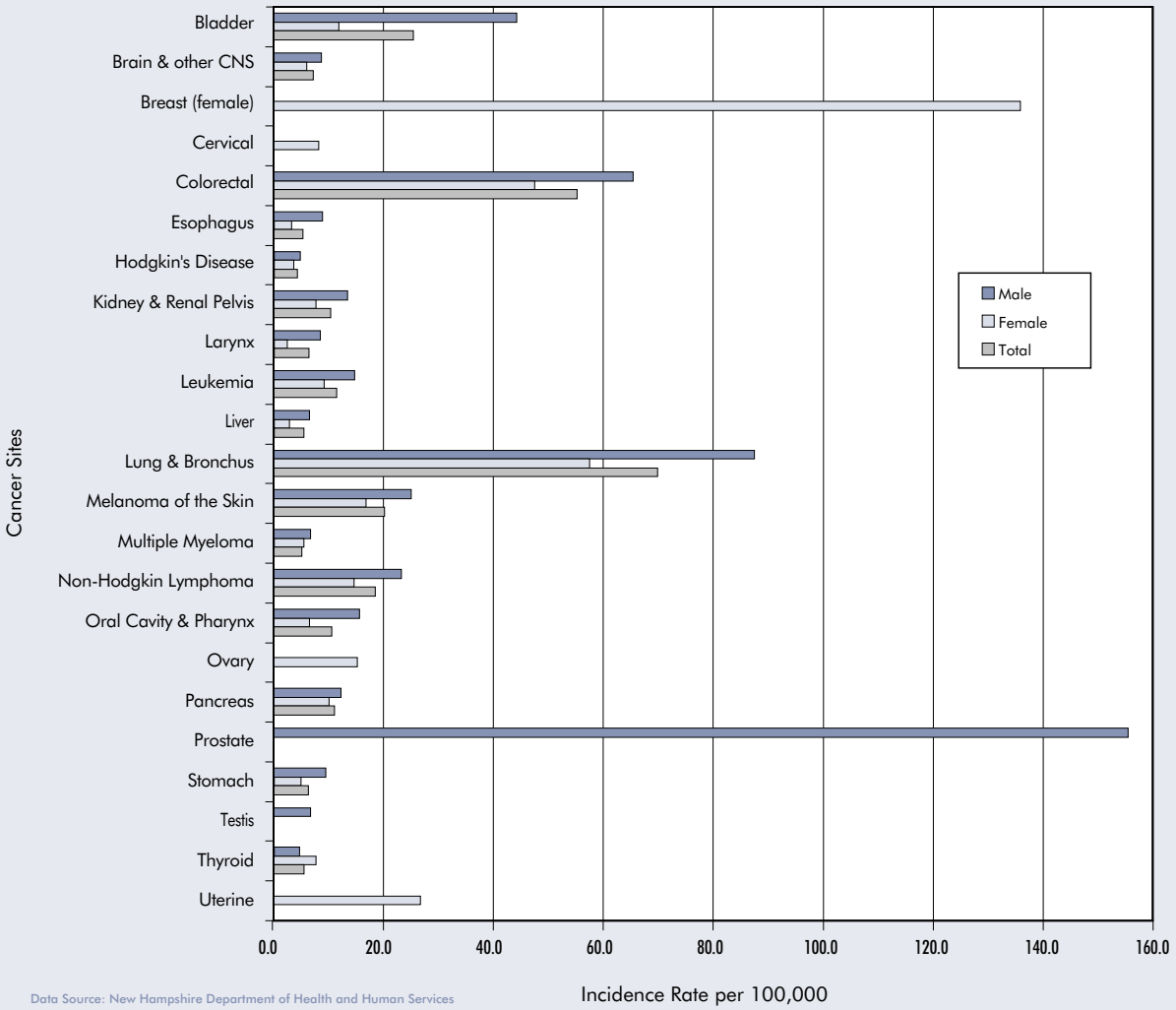
Age Adjusted Cancer Mortality Rates for all Ages in New Hampshire for 1997 to 2001



Data Source: New Hampshire Department of Health and Human Services

Figure 2

Age Adjusted Incidence Rates for all Ages in New Hampshire for 1997 to 2001



Data Source: New Hampshire Department of Health and Human Services

Figure 3

Breast Cancer

Breast cancer is the most frequently diagnosed cancer in women. In 2001, New Hampshire had the 9th highest invasive breast cancer incidence rate in the nation and ranked 22nd for breast cancer mortality[5]. Between 1997 and 2001, the age-adjusted incidence rate was 135.8 per 100,000 people for New Hampshire as compared to 141.7 for the United States[1,9]. For this same time period, the age-adjusted death rate for breast cancer in females in New Hampshire was 27.2 per 100,000 people as compared to a rate of 27.7 for the United States as a whole; this difference is not statistically significant[1,10].

At present, 52% of breast cancers are diagnosed at a localized stage, when the 5-year survival rate is 97.5%[1]. Improving breast cancer screening even further can lead to more early stage diagnoses and result in significant reductions in mortality.

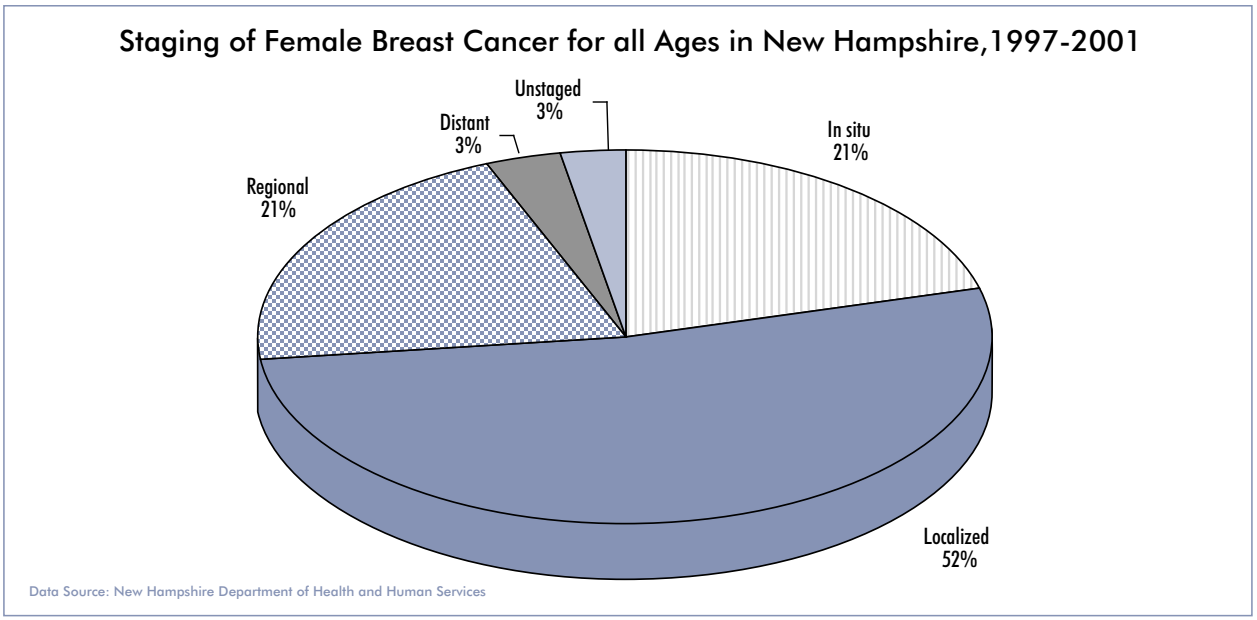


Figure 4

Colorectal Cancer

Colorectal cancer is the second most commonly diagnosed cancer in the combined male/female population. In 2001, while New Hampshire had the 22nd highest incidence rate of invasive colorectal cancer in males, New Hampshire ranked 14th highest for deaths in males due to colorectal cancer[5]. For this same year, New Hampshire females fared worse, with a rank of 13th in both incidence and death rates[5]. The New Hampshire incidence of colorectal cancer between 1997 and 2001, for males and females, is not significantly different from that of the overall population or white population of the United States when age and sex-adjusted. However, New Hampshire's death rates for males and females for this same time period is higher than the death rates for the US white population, representing a statistically significant difference.

For the aggregate period of 1997 through 2001, New Hampshire males had a colorectal cancer incidence of 65.4 per 100,000 compared to the national white male rate of 63.3 per 100,000[1,9]. Females had an incidence of 47.5 per 100,000 compared to the national white female rate of about 46.9 per 100,000[1,9].

For the same period of 1997-2001 the mortality rate for New Hampshire males was 28.4 per 100,000 compared to the US white male rate of 24.8 per 100,000[1,10]. The female mortality rate in New Hampshire was 19.4 per 100,000 compared to the US white female rate of 17.1 per 100,000[1,10.]

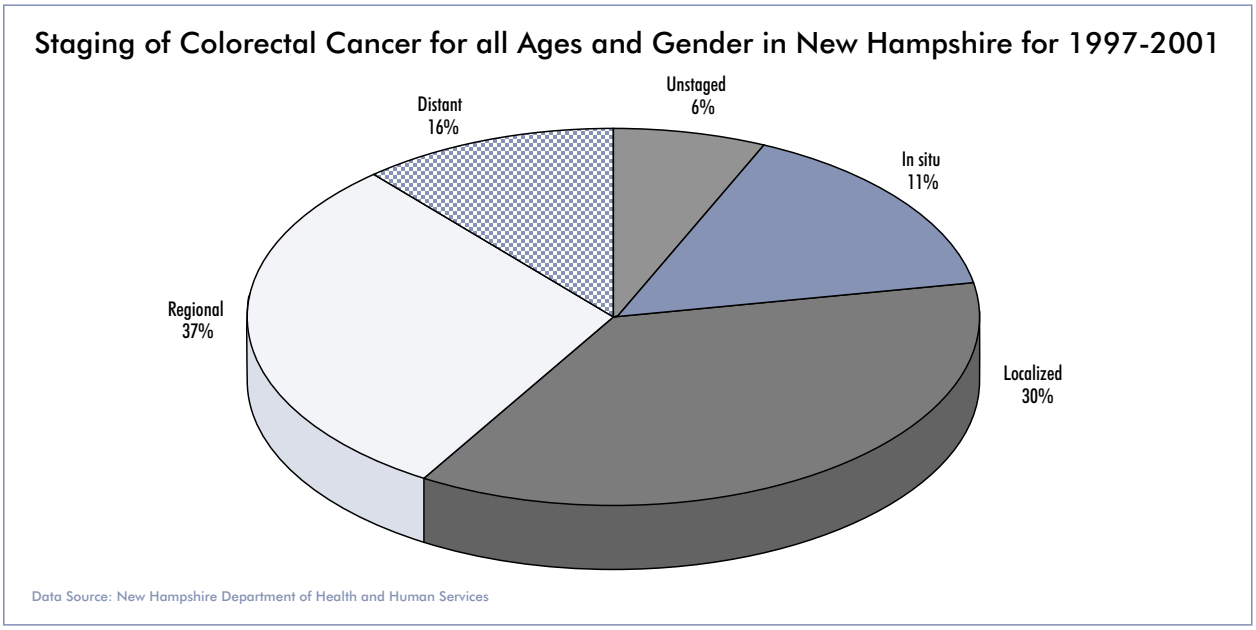


Figure 5

The stage at diagnosis did not significantly differ between males and females. However, the majority of colorectal cancers diagnosed in New Hampshire were at a later stage, with 37% at the regional stage and 16% at the distant stage[1]. Of the remainder, 11% were in situ and 30% were localized at diagnosis[1]. The challenge ahead is to increase screening rates so that more colorectal cancers are prevented through finding and removing polyps, and colorectal cancers which do occur are identified at an early-localized stage.

Lung Cancer

Lung cancer is the leading cause of cancer deaths for both men and women, killing more people than colon, breast, and prostate cancers combined[5]. In 2001, New Hampshire ranked 35th among males for lung cancer incidence and 40th for lung cancer deaths[5]. For females, New Hampshire's rankings are much worse when compared to all states, at 16th for incidence and 15th for deaths[5]. New Hampshire's incidence of lung cancer is higher than the US white population incidence as a whole and when broken out by gender. New Hampshire's overall incidence rate of lung cancer for 1997 to 2001 was 69.8 per 100,000 population as compared to the US white population rate of 65.9 per 100,000 population[1,9]. Males are diagnosed more frequently with lung cancer than females. For the time period of 1997 to 2001, the female incidence rate in New Hampshire was 57.5 per 100,000 compared to the national rate of 51.3 per 100,000 population[1,9]. The incidence rate for males for this same time period was 87.5 per 100,000 compared to the national rate of 77.9 per 100,000 population[1,9]. Females in New Hampshire for the time period of 1997 to 2001 had higher death rates than the US white female population—44.4 per 100,000 versus 41.5 per 100,000 for the US white population[1,10]. For this same time period, males experience death rates of 73.5 per 100,000 versus the US white population of 76.6 per 100,000[1,10].

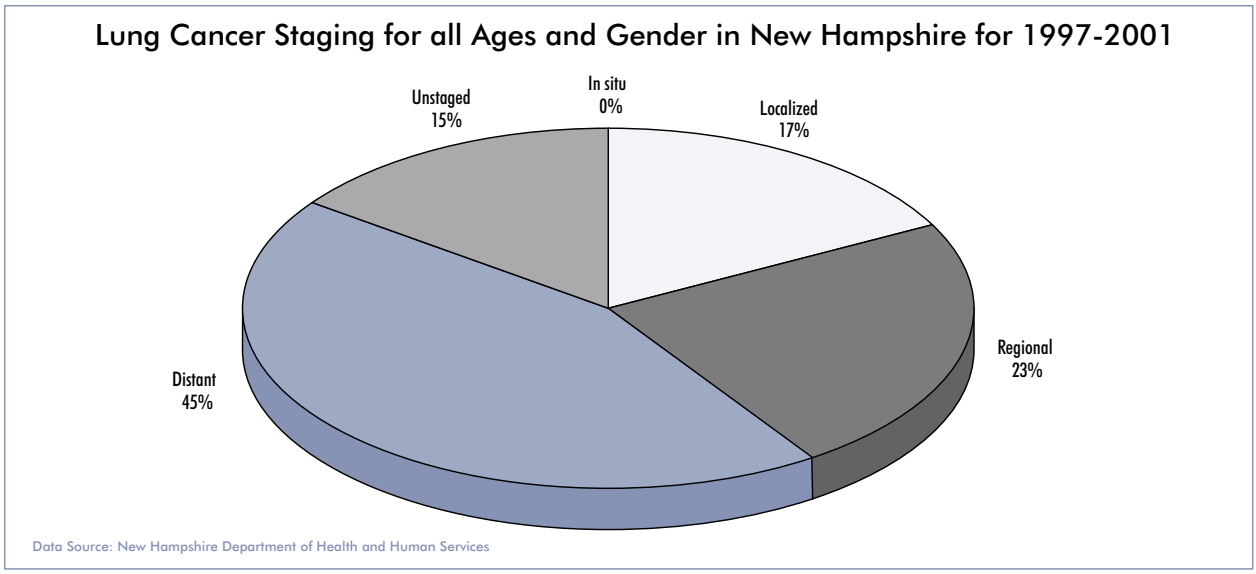


Figure 6

Lung cancer has frequently spread by the time it is diagnosed. During the period 1997-2001, more cases of lung cancer were diagnosed at the distant stage (45%) than at any other stage[1]. Twenty-three percent of the cases were diagnosed at the regional stage, 17% at the localized stage and 15% were unstaged[1]. Nearly none were diagnosed in situ (0.05%)[1]. Currently, no effective screening test exists to detect lung cancer in asymptomatic people, unlike the screening tests available for colon, breast, and cervical cancer.

Prostate Cancer

Prostate cancer is the second most common type of cancer occurring in men (second only to skin cancer). New Hampshire's overall incidence rate for prostate cancer in the period 1997-2001 was 155.5 per 100,000 population, as compared to the US white population rate of 167.4 per 100,000 population[1,9]. While the incidence rate was significantly lower than national rates, the death rate was not significantly different from that of the US white population of 28.8 per 100,000 as compared to New Hampshire's rate of 30.3 per 100,000 population[1,10]. During this same five-year period, most prostate cancer diagnoses were at the localized (79%) stage[1].

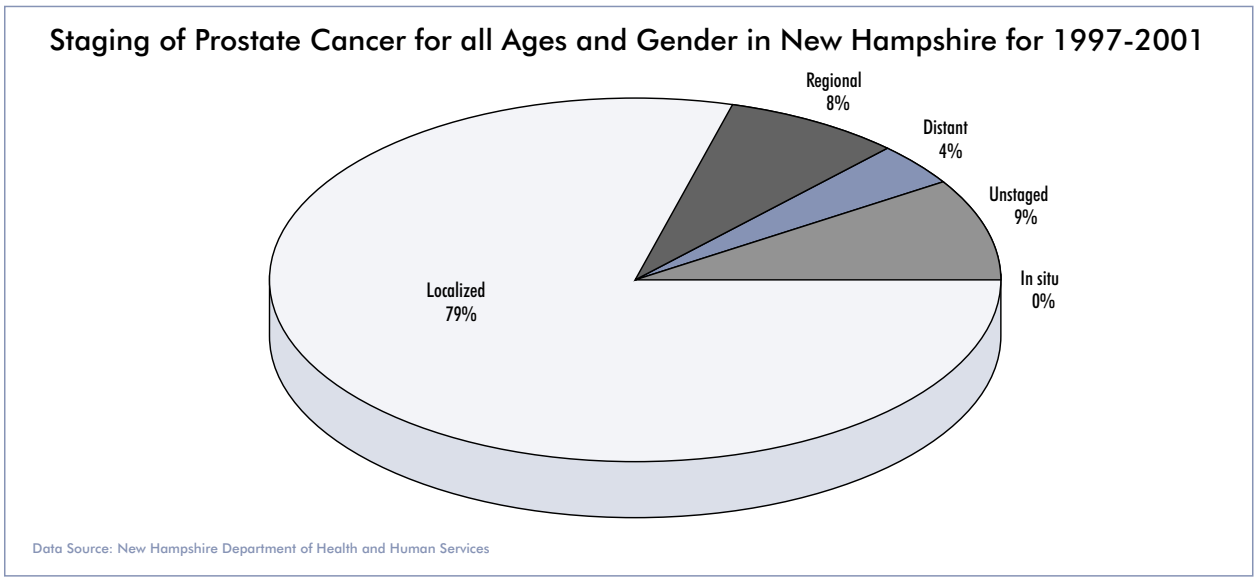


Figure 7

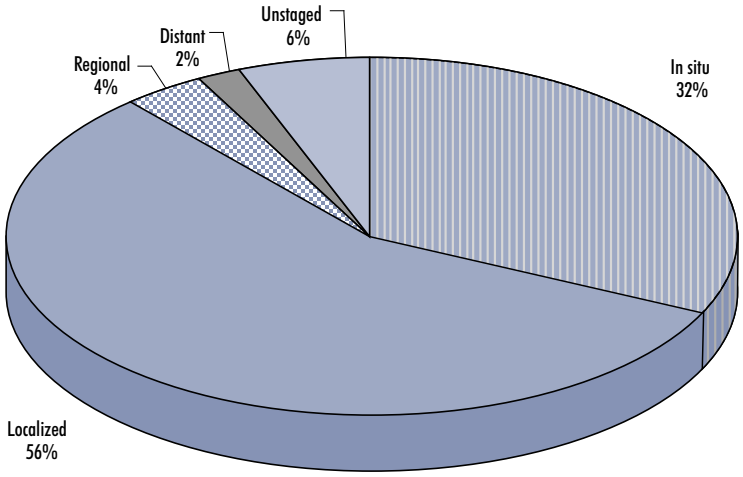
Skin Cancer (Melanoma)

Of all skin cancer deaths in the US in 2003, about 7,600 of the 9,800 total (nearly 78%) were due to melanoma of the skin[2]. For this reason, although there are several types of skin cancers, data are mainly available for melanoma of the skin. The incidence of melanoma of the skin is relatively high as compared with other types of cancers; however, the death rates are relatively lower than other types of cancers. In comparing New Hampshire to the United States, the best comparison is still with that of the US white population, which tends to have a higher incidence of melanoma of the skin than does the general population. In this comparison, New Hampshire does better than the US white population. The incidence rate for males is higher than that for females (25.1 as compared to 16.9 per 100,000), but still lower than the US rates for white males of 25.4 and white female rates of 16.8 per 100,000 for the 1997-2001 aggregate period[1, 9].

For this same time period, the New Hampshire mortality rate for males was 3.9 per 100,000 compared to the US white male population rate of 4.3 per 100,000 and the female rate for mortality was 2 per 100,000, the same as the US white female population[1,10].

During the five-year period of 1997-2001, more skin melanomas were diagnosed at the localized (56%) stage than at any other stage[1]. The combined later stage diagnoses of distant and regional was 6% and in situ stage diagnosis was 32%[1]. Six percent of the cases diagnosed were unstaged[1]. When detected and treated early, melanoma is highly curable. The 5-year survival rate nationally is 90% for melanoma detected at all stages[2].

Skin Cancer (Melanoma) Staging for all Ages and Gender in New Hampshire for 1997-2001



Data Source: New Hampshire Department of Health and Human Services

Figure 8

Part II

Priorities, Goals, Objectives, and Strategies Along the Continuum of Care

Overview

From the beginning of the planning process, the overriding goal of the New Hampshire Comprehensive Cancer Collaboration was to create a plan that did not "sit on a shelf," but that would become the framework for effective action. This living plan is intended to guide efforts over the next five years to reduce the incidence, morbidity, and mortality of cancer in New Hampshire.

As mentioned in Part I, five workgroups were formed in September 2004, representing breast, colorectal, lung, prostate, and skin cancer. In addition, in the Spring of 2005 three additional workgroups came together around treatment and survivorship, palliation, and emerging issues for all cancer survivors. Through the workgroup process, sixty-nine objectives and strategies were identified as being data driven, relevant and realistic. The membership of the New Hampshire Comprehensive Cancer Collaboration voted to prioritize these objectives and strategies and to assess the resources available for their implementation. The *priority objectives and strategies* are outlined on the following pages and are organized along the cancer care continuum: primary prevention, prevention and early detection, treatment and survivorship, palliation, and emerging issues. Please note that the priority objectives are not numbered in order of importance. The workgroups charged with implementing these objectives are also organized along this continuum.The objectives and strategies that were identified by the workgroups but did not fall into the initial priority group are listed on page 45. These objectives and strategies will be considered for implementation in the future.

The Comprehensive Cancer Collaboration recognizes the importance of all cancers. Three of the five cancer care continuum sections—treatment and survivorship, palliation, and emerging issues—contain objectives and strategies relevant to all cancer sites.

Recommendations for a healthy lifestyle

- Do not smoke
- If you currently smoke, try to quit
- Maintain a healthy weight
- Adopt a physically active lifestyle
- Eat a healthy and balanced diet rich in whole grains, fruits and vegetables
- Avoid second-hand smoke
- Avoid excess exposure to the sun and tanning facilities
- If you drink alcoholic beverages, do so in moderation and avoid alcohol during pregnancy
- Be screened for cancer
- Know your family history of cancer
- Assess your home for radon

Summary Listing of Priority Objectives

Primary Prevention Priority Objectives

1: Decrease the percentage of people who report cigarette smoking in the past month among youth from 19.1% to 16% and in adults from 21.7% to 12%.

2: Reduce the number of people in New Hampshire exposed to second-hand smoke in public places through increasing the number of places that are smoke free and reduce exposure to radon gas in homes.

3: Prevent skin cancer in New Hampshire by decreasing exposure to ultraviolet light.

4: Reduce the prevalence of overweight adults from 50% to 40% and youth from 9.9% to 5%.

5: Increase the percentage of adults and children who engage in physical activity for at least 30 minutes a day, 5 days a week to 50% from a baseline of 27% for youth and 24% for adults.

6: Increase the percentage of adults and children who eat at least five servings of fruits and vegetables every day to 50% from a baseline of 28.5% in adults.

Prevention and Early Detection Priority Objectives

7: Increase the percentage of women aged 40 or older who receive regular breast cancer screenings to 80%, regardless of education, income, or race.

8: Increase the percentage of New Hampshire residents who are aware of the importance of colorectal cancer screening for both prevention and early detection.

9: Increase the percentage of average-risk adults age 50 and older who are screened for colon cancer using sigmoidoscopy or colonoscopy to 70% from the current baseline of 62.2% and increase the proportion of those at increased risk for colorectal cancer receiving recommended screening.

10: Promote informed decision-making related to prostate cancer screening.

Treatment and Survivorship Priority Objectives

11: Support existing and evolving patient resources and systems that can facilitate optimum care for cancer survivors.

12: Increase the number of New Hampshire residents participating in cancer-related clinical trials.

13: Ensure the availability of a protocol for the introduction and discussion of advanced care directives and other end-of-life issues.

Palliation Priority Objectives

14: Every New Hampshire health-care system will offer people living with cancer timely information and access to palliative care.

15: All persons living with cancer shall have effective management of pain and other symptoms.

Emerging Issues Priority Objective

16: Increase public and provider awareness regarding emerging issues in New Hampshire.

"At the Whitefield School, we believe that cancer prevention topics such as smoking, substance abuse, nutrition and physical activity should start at an early age and be an integrated part of every child's learning."

Ellen Turcotte, Principal
Whitefield School

Primary Prevention

Primary Prevention

Goal: Reduce and prevent cancer risk by living a healthy lifestyle.

Primary prevention involves the avoidance of cancer causing exposures and behaviors. A healthy lifestyle is the foundation of primary cancer prevention. While not every cancer can be prevented, evidence shows that one's individual risk, for a number of the most common cancers, can be reduced through adherence to good health habits. The health of young people, and the adults they will become, is critically linked to the establishment of healthy behaviors in childhood[8,11]. The Comprehensive Cancer Collaboration approach to primary prevention is to support all of the activities that encourage the people of New Hampshire to live healthy lives.

Tobacco Use

According to the American Cancer Society (ACS), smoking accounts for 30% of all cancers. Tobacco use usually begins in teenagers, and approximately 80% of current adult smokers started smoking before age 18[14]. Preventing tobacco use among New Hampshire residents, helping people to quit smoking, and reducing exposure to second-hand smoke are three critical pieces of comprehensive tobacco prevention.

In New Hampshire, 22% of adults smoke cigarettes, with more men smoking than women[15]. One out of every three young adults (18-24 year olds) smoke, compared to only one out of 10 of those older than 65[15]. Smoking is much more common among those without a high school diploma and those with lower income levels[15]. While smoking rates among New Hampshire's children are improving, youth tobacco use is still a problem: one out of every five high school students reported smoking in 2004, and one out of every 25 middle school students reported smoking in 2004[16].

In addition, New Hampshire has the lowest tobacco tax, at $.80, in the Northeast and is below the national average, $.91. New Hampshire uses none of the tobacco tax dollars from the Tobacco Master Settlement Agreement for tobacco prevention, whereas the Centers for Disease Control and Prevention (CDC) recommend that New Hampshire spend $10.9 million per year on tobacco prevention.

Environmental Exposure

Exposure to new man-made and naturally occurring carcinogens in the home, workplace, and environment, can increase an individual's risk of developing cancer. These carcinogens include, but are not limited to, second-hand tobacco smoke, ultraviolet radiation, and radon gas.

Secondhand Smoke

With regards to clean indoor air, 73% of New Hampshire adults reported having rules against smoking anywhere inside their homes, and 79% of adults work in smoke-free workplaces[14]. According to a 2001 New Hampshire Restaurant survey, 57% of New Hampshire restaurants are smoke-free. By law, a number of public places must be smoke-free, including public schools grades K-12, licensed child-care agencies, and hospitals. The public areas not covered by New Hampshire law include restaurants, hotels, theaters, banks, office buildings, and shopping malls.

Radon Gas

While tobacco use is the leading cause of lung cancer, approximately 15,000 to 20,000 lung cancer deaths per year are related to radon exposure. Radon is a radioactive gas released from normal decay of uranium in rocks. Radon gas usually exists at very low levels outdoors but can accumulate to high levels within houses lacking adequate ventilation. Because it is an invisible, odorless, and tasteless gas, testing of homes is the only way to know if elevated radon levels are present. The US Environmental Protection Agency recommends that all households be tested for radon gas.

Exposure to Ultraviolet Rays

The vast majority of skin cancers are due to unprotected and excessive ultraviolet (UV) radiation exposure. Artificial sources, such as tanning booths, add to UV exposure. Each year, over-exposure to ultraviolet rays poses a serious threat of melanoma and other skin cancers for New Hampshire residents. In 2004, 42.6% of New Hampshire adults age 18 and over reported having sunburn in the last year and of these adults, 32.5% said they had had three or more sunburns in the past year[15]. Basal cell and squamous cell cancers are the most common form of skin cancer. Protecting the skin against UV exposure can prevent these cancers. The ACS recommends wearing protective clothing and using sunscreens with SPF (Sun Protection Factor) 15 or greater when exposed to the sun.

Nutrition and Physical Activity

Overweight and obesity are associated with increased risk of cancer. In addition, obesity contributes to many health conditions other than cancer, including heart disease, hypertension, and diabetes. It is critical that New Hampshire people, organizations, and communities work together to resolve this growing epidemic.

In 2003, 13.4% of New Hampshire high school students were at risk for becoming overweight and 9.9% were overweight. Fifty percent of New Hampshire adults reported being overweight[12,13]. In New Hampshire, only 27% of children and 24% of adults engage in physical activity for at least 30 minutes a day, 5 days a week. In contrast, 26.4% of New Hampshire children watched three or more hours per day of television[8].

Six objectives have been identified as priorities for primary prevention. Preliminary strategies for these objectives have also been identified, and will be clarified and expanded by the workgroup as it begins the implementation process.

Priority Objective 1:

Decrease the percentage of people who report cigarette smoking in the past month among youth from 19.1% to 16% and in adults from 21.7% to 12%.

Strategies:

1. Increase cigarette tax to at least $1.30 by 2008.
2. Educate employers about smoking cessation and the benefits of a smoke-free workplace, including college campuses.
3. Educate health-care professionals about the importance of tobacco prevention education and increase the percentage of health-care providers who offer tobacco cessation counseling to patients and their families.
4. Conduct a media campaign for the public regarding the importance of tobacco use prevention and cessation.
5. Assess barriers and gaps in smoking cessation programs in New Hampshire and develop a plan to expand access to programs.
6. Increase level of funding for statewide tobacco control programs to the CDC-recommended level of per capita spending.
7. Continue to survey tobacco use, utilizing the NH Behavioral Risk Factor Surveillance System and the Youth Risk Behavior Survey.
8. Collect and evaluate data on tobacco use in disparate populations and develop interventions.
9. Advocate for continued funding of state smoking cessation hotline and increased funding to cover nicotine replacement products for the uninsured.
10. Eliminate non-compliance among tobacco retailers selling products to minors.
11. Support evidence-based tobacco prevention and cessation programs targeted at youth.

Priority Objective 2:

Reduce the number of people in New Hampshire exposed to second-hand smoke in public places through increasing the number of places that are smoke free and reduce exposure to radon gas in homes.

Strategies:

1. Utilize a mass media campaign to educate the public on the risks of second-hand smoke exposure in the home, workplace, etc.
2. Develop a grassroots campaign for creating local control of clean indoor air regulations and/or amending the state's clean indoor air law in order to prohibit smoking in all indoor public places by 2010.
3. Increase the number of New Hampshire homes tested for radon gas.

Priority Objective 3:

Prevent skin cancer in New Hampshire by decreasing exposure to ultraviolet light.

Strategies:

1. Promote evidence-based materials on decreasing UV exposure to New Hampshire schools, ski resorts, camps, community programs, employers with outside workers, and other recreational facilities.
2. Conduct a public campaign about prevention of skin cancer.
3. Encourage primary-care providers to have a discussion with their patients about the need for limiting exposure to UV rays.
4. Explore the potential of a skin-cancer-prevention-awareness program for service professionals licensed by the state, including, but not limited to, barbers, cosmetologists, and estheticians.

Priority Objective 4:

Reduce the prevalence of overweight adults from 50% to 40% and youth from 9.9% to 5%

Strategies:

1. Advocate for policies that promote healthy food choices in schools, the work place, and communities.
2. Develop relationships with health-care providers to establish baseline measurements for educating their patients about a healthy weight and lifestyle.
3. Support the activities of all statewide groups relative to the distribution of educational materials on the importance of weight management.

Priority Objective 5:

Increase the percentage of adults and children who engage in physical activity for at least 30 minutes a day, 5 days a week to 50% from a baseline of 27% for youth and 24% for adults.

Strategies:

1. Advocate for policies that promote increased physical activity in schools, the workplace, and communities.
2. Encourage health-care providers to discuss appropriate physical activity guidelines with their patients.
3. Utilize various fundraising walks as an avenue to raise awareness regarding physical activity.
4. Support the activities of all statewide groups relative to the distribution of educational materials on the importance of physical activity.
5. Continue to offer and encourage participation in statewide pedometer-based walking programs.

Priority Objective 6:

Increase the percentage of adults and children who eat at least five servings of fruits and vegetables every day to 50% from a baseline of 28.5% in adults.

Strategies:

1. Collect baseline data regarding the intake of fruits and vegetables by New Hampshire youth using the Youth Risk Behavior Survey (YRBS).
2. Support statewide activities relative to the distribution of educational materials on the importance of fruits and vegetables as part of a healthy diet.

"I have a family history of colon cancer. I can't tell you how important it is to get regular cancer screenings. It can mean the difference between life and death."

J. Thomas Manseau

Prevention and Early Detection

Prevention and Early Detection

Goal: Reduce cancer morbidity and mortality by increasing the screening rates for those cancers where evidence-based guidelines exist.

In addition to maintaining a healthy lifestyle, following cancer screening recommendations is the most important thing New Hampshire residents can do to reduce their chances of dying from cancer. Early detection through regular screening examinations detects cancerous or precancerous changes at an early stage. It can also detect cancers earlier in their development and has proven to reduce mortality from cancers of the breast, cervix, and colon and rectum. There are other cancers for which screening may be associated with lower mortality, but the evidence is less certain.

Breast and Cervical Cancer

Breast cancer screening is a valuable tool in decreasing breast cancer mortality. Currently, in the United States 63% of breast cancers are diagnosed at a localized stage, for which the five-year survival rate is 97.5%[8]. These high rates of early detection of breast cancer can be attributed to the use of mammography screening, as well as to a high awareness of breast cancer symptoms in the population.

New Hampshire breast cancer screening rates are available from the Behavioral Risk Factor Surveillance System (BRFSS). According to the 2004 data, 80.1% of all New Hampshire women have had a mammogram in the past two years. When broken down by income and education level, however, clear disparities emerge: only 66% of women in the lowest income bracket, and 74% of women at the lowest educational level, have had mammograms in the past two years. Information about breast cancer screening rates grouped by race is not available.

The New Hampshire Department of Health and Human Services has provided funding for a Breast and Cervical Cancer Program since 1985. In 1990, the US Congress passed the Breast and Cervical Cancer Mortality Prevention Act that mandated and provided funding for the National Breast and Cervical Cancer Early Detection Program. New Hampshire has combined its state resources with federal funding since 1993, greatly expanding New Hampshire's ability to provide a statewide Breast and Cervical Cancer Program. The program offers eligible participants access to the following services:

- Clinical Breast Exam
- Mammography
- Pap Smear
- Diagnostic Follow-up

Cervical cancer rates for both incidence and mortality have decreased significantly in the past several decades, with most of the reduction attributed to the Pap test. The Pap test detects cervical cancer and pre-cancerous lesions. Cervical cancer is one of the most successfully treatable cancers when detected early. In New Hampshire in 2004, approximately 95.6% of women aged 18+ reported ever having a Pap test and 83.9% reported having a Pap test in the last two years[15].

Colorectal Cancer

Colorectal cancer screening reduces death from colorectal cancer. Furthermore colorectal cancer is one of the few cancers that can be prevented through screening, because the small growth, or polyp, from which most colon cancers develop can be removed during the screening process. Most colon cancers begin as polyps, some of which can turn into cancer over several years. These polyps can be identified and removed during screening.

There are several available screening options, which can be effective in detecting the disease when it is present. Early diagnosis and treatment of colorectal cancer result in a survival rate of 90%. However, at this time only about 41% of colorectal cancers in New Hampshire are diagnosed at this early stage. Despite the availability of different screening options and their lifesaving potential, colorectal cancer screening is not as widely used as it should be.

In New Hampshire, 62.2% of residents age 50 and older reported ever having had a sigmoidoscopy or colonoscopy. Approximately 85% of *these adults* reported having a sigmoidoscopy or colonoscopy within the past five years[15]. Lack of insurance coverage for the full range of colorectal cancer screening tests, fear and embarrassment, lack of awareness, and physicians not recommending screening may all contribute to low rates of screening.

Prostate Cancer

At the present time, there is not a consensus among national organizations regarding the value of prostate cancer screening. Both the American Cancer Society and the American Urological Association recommend that, pending the outcome of prospective randomized trials on the value of prostate cancer screening, shared decision-making with one's physician about testing is appropriate.

Four objectives have been identified as priorities for prevention and early detection. Preliminary strategies for these objectives have also been identified, and will be clarified and expanded by the workgroup as it begins the implementation process.

Priority Objective 7:

Increase the percentage of women aged 40 or older who receive regular breast cancer screenings to 80%, regardless of education, income, or race.

Strategies:

1. Develop a strategy to advocate for continued funding for the Breast and Cervical Cancer Program and Medicaid Treatment Option on a state and federal level.
2. Conduct at least one awareness campaign to promote screening programs and services for low-income women.
3. Continue to measure mammogram rates every two years through the Behavioral Risk Factor Surveillance System.
4. Collect and evaluate data on diverse and disparate populations and promote evidence-based interventions that target these women for screening.

5. Create a Breast Cancer Partnership by 2006, including physicians, nurses, the Department of Health and Human Services and other providers, breast cancer survivors, and individuals who have a specific body of knowledge related to breast cancer, with the intention of increasing screening rates.
6. Collaborate with state partners, community organizations, cancer councils, faith-based organizations, or other systems to implement awareness and screening initiatives with women from underserved populations.

Priority Objective 8:

Increase the percentage of New Hampshire residents who are aware of the importance of colorectal cancer screening for both prevention and early detection.

Strategies:

1. Conduct a survey of the public to determine the percentage of the population aware of the need for colorectal cancer screening for both prevention and early detection.
2. Conduct at least three media campaigns in New Hampshire to increase public awareness regarding the importance of screening for colorectal cancer.
3. Develop a plan or system to collect/obtain colorectal cancer data on diverse and disparate populations.
4. Develop a speaker's bureau for colorectal cancer screening consisting of individuals who had polyps removed that might have turned into cancer.

Priority Objective 9:

Increase the percentage of average-risk adults age 50 and older who are screened for colorectal cancer using sigmoidoscopy or colonoscopy to 70% from the current baseline of 62.2% and increase the proportion of those at increased risk for colorectal cancer receiving recommended screening.

Strategies:

1. Assess insurance coverage of New Hampshire residents for colorectal cancer screenings and, if not adequate, develop a plan of action.
2. Notify all primary-care physicians that rates of colorectal cancer screening will be a Health Plan Employer Data and Information Set (HEDIS) measurement to be used to measure quality by National Committee for Quality Assurance (NCQA) and work with the health plans to publish this data.
3. Implement evidence-based educational programs to increase the knowledge of primary-care physicians regarding colorectal cancer screening.
4. Work with primary-care physicians' offices to implement an organized, systems-based approach for colorectal cancer screening.
5. Coordinate with Business and Industry Association and Human Resource Director Associations to encourage employers to provide a day off for employees receiving a colonoscopy or flexible sigmoidoscopy.

6. Assess the numerous perceived barriers to colorectal cancer screening, such as transportation, reimbursement, capacity, loss of work time, fear, and embarrassment through knowledge, attitudes, and behavior survey.
7. Based on the results of knowledge, attitudes, and behavior survey, develop a work plan for priority areas.
8. Use data, when available, from the New Hampshire Colonoscopy Registry, to understand and address how screening and surveillance are utilized. This information, including follow-up intervals, incidence and prevalence of polyps, high-risk individuals, complications, and other available data, will assist in optimizing colorectal cancer screening.
9. Develop standard preparation protocols to ease the discomfort of pre- and post-screening and disseminate these to providers, including pharmacists, statewide.
10. Collect and disseminate to providers culturally appropriate decision-making information regarding screening guidelines.
11. Determine if colorectal cancer should be a yearly Behavioral Risk Factor Surveillance System Question and whether the question should be modified.
12. Explore and secure funding for colorectal cancer screening for un- and underinsured New Hampshire residents.

Priority Objective 10:

Promote informed decision-making related to prostate cancer screening.

Strategies:

1. Conduct a public awareness campaign encouraging men to talk with their physicians about prostate cancer.
2. Identify the best evidence-based materials for a New Hampshire prostate cancer public awareness campaign.
3. Explore the possibility of starting a New Hampshire Prostate Cancer Coalition.
4. Add a question on the BRFSS as to whether men have discussed prostate cancer with their physician.
5. Collect and evaluate data to identify diverse and disparate groups and develop interventions for these populations.

"I was looking for a clinical trial which would give me a little more time because the prognosis for people with this [form of lung cancer] is very short. I ended up enrolling in a clinical trial that I'm still on. It's an oral chemo...which is [an] experimental drug. And I go once every few weeks to be checked out. I've definitely gotten stronger. I still have the side effects, but I definitely feel pretty good."

Diana Goldstein

Treatment and Survivorship

Treatment and Survivorship

Goal: Quality treatment shall be available and accessible to all New Hampshire residents.

The rapid development and increasing complexity of cancer treatment require careful attention to ensure that current approaches to care are consistently available to all New Hampshire residents. Generally, advancements and improvements in cancer treatment occur through the process of clinical research trials. Enrolling in a clinical trial allows a patient to contribute to the research process, as well as potentially to receive innovative treatment for their particular cancer. Many of the cancer centers in New Hampshire provide patients the opportunity to participate in clinical trials.

Treatment of cancer not only involves the acute disease process but also the short-term and long-term effects of the cancer and its treatment. In addition, part of the treatment process should include the discussion of advanced-care directives. Advanced-care directives should be discussed prior to the time that they may be needed. As the number of cancer survivors in New Hampshire increases, more services will need to be made available to treat the broad range of physical, psychological, social, spiritual, and financial issues that may arise from being a cancer survivor

Three objectives have been identified as priorities for treatment and survivorship. Preliminary strategies for these objectives have also been identified, and will be clarified and expanded by the workgroup as it begins the implementation process.

Priority Objective 11:

Support existing and evolving patient resources and systems that can facilitate optimum care for cancer survivors.

Strategies:

1. Identify and promote existing national and local resources.
2. Encourage and support the development of patient navigation systems.
3. Enhance professional and public awareness about cancer treatment by sponsoring educational programs, and by developing publications and websites.
4. Identify specific treatment and support needs for persons who experience cancer as a long-term or ongoing process.
5. Explore development of survivorship clinics that focus on the unique medical and emotional issues affecting cancer survivors.

Priority Objective 12:

Increase the number of New Hampshire residents participating in cancer-related clinical trials.

Strategies:

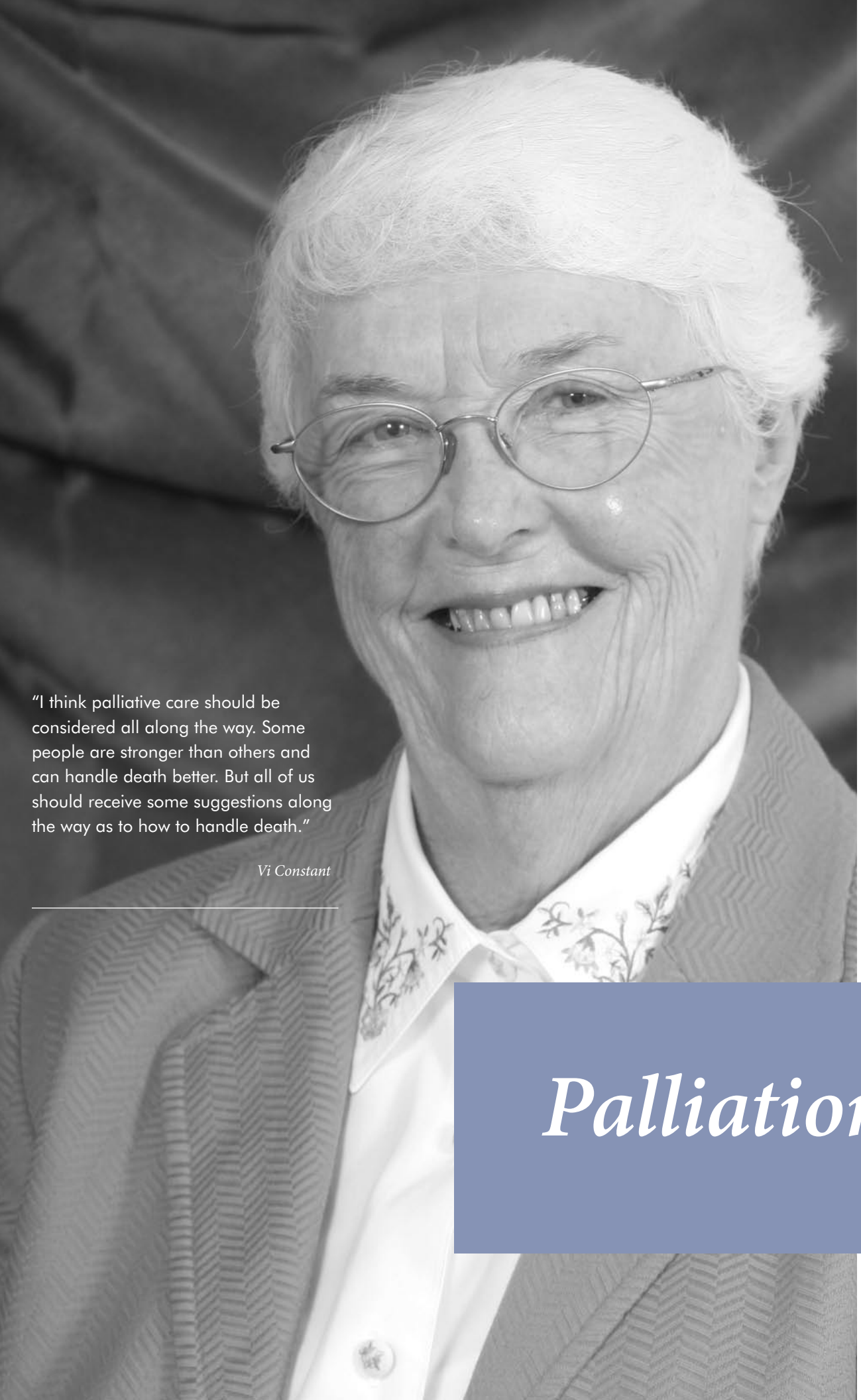
1. Identify and address barriers to participation in clinical trials in New Hampshire.
2. Support the American College of Surgeons and other appropriate organizations in reviewing the percentage of patient participation in Clinical Trials as part of their Cancer Center credentialing process.
3. Encourage educational and promotional opportunities that explain the value of clinical trials to the public.

Priority Objective 13:

Ensure the availability of a protocol for the introduction and discussion of advanced-care directives and other end-of-life issues.

Strategies:

1. Ensure all appropriate providers have access to educational programs on the use of advanced directives and DNR (Do Not Resuscitate) orders.
2. Identify the most appropriate evidence-based materials on advanced directives and DNR orders.
3. Disseminate the identified materials through hospitals, community agencies, and hospices.
4. Encourage inclusion of education programs on the initiation of advanced directives and DNR in grand rounds and medical education.



"I think palliative care should be considered all along the way. Some people are stronger than others and can handle death better. But all of us should receive some suggestions along the way as to how to handle death."

Vi Constant

Palliation

Palliation

Goal: New Hampshire residents living with cancer shall experience patient-centered cancer care that encompasses routine assessment and high quality management of physical symptoms, as well as emotional, social and spiritual distress.

It is estimated that more than 70% of all persons living with cancer will experience pain[17,18]. Nausea, difficulty breathing, depression, fatigue, and other physical and psychological symptoms are also commonly experienced. Frequently, the complexity of symptom control and supportive care for persons living with cancer requires an interdisciplinary, patient-centered approach that integrates palliative aspects of care concurrent with disease-modifying medical treatments. Goals of cancer care extend beyond cure and prolonged survival to include informed decision-making, enhanced quality of life, optimized function, and preserved opportunities for personal well-being and development.

Palliative aspects of care should be available during all phases of the disease, including staging, treatment, survivorship, relapse or recurrence, advanced illness and dying. Cancer care providers of all disciplines can be expected to possess basic knowledge and skills required to communicate effectively with cancer patients and their families, promote informed decisions, and assess and manage physical discomfort and emotional distress. Specialty palliative care, through clinical consultation services and hospice programs should be available to support oncology teams and, when needed, to participate in patient care and family support. The ultimate goal of palliative care is to maintain the best possible quality of life for the person and his/her loved ones.

Definition of Palliation

The working definition of palliative care used by the Comprehensive Cancer Collaboration is the following: Interdisciplinary care of persons with life-threatening illness or injury that addresses physical, emotional, social, and spiritual needs and seeks to improve the quality of life for the person with an illness and his/her loved ones.

Two objectives have been identified as priorities for palliation. Preliminary strategies for these objectives have also been identified, and will be clarified and expanded by the workgroup as it begins the implementation process.

Priority Objective 14:

Every New Hampshire health-care system will offer people living with cancer timely information and access to palliative care.

Strategies:

1. Require all insurers in New Hampshire to provide a level of insurance coverage for palliative and hospice care that meets or exceeds comparable Medicare provisions.
2. Increase to 80 days the average length of stay in hospice care as measured by Medicare and private insurance data.
3. Increase the number of New Hampshire hospitals and health systems with clinical palliative care services.
4. Increase the number of New Hampshire hospice programs offering palliative-care services in addition to home hospice care.
5. Provide education and support to New Hampshire hospitals to develop clinical Palliative Care programs, consisting of a minimum of two designated individuals from different clinical disciplines (such as a physician and nurse) responsible for dissemination of information and resources on palliative care.
6. Provide education and support for the improvement of coordination between hospitals and community agencies providing palliative and hospice care.
7. Expect all clinicians caring for persons living with cancer to acquire basic information and skills in the principles of palliative and hospice care.
8. Provide a variety of education programs and formats enabling clinicians caring for persons living with cancer to acquire basic information and skills in the principles of palliative and hospice care.
9. Increase the number of New Hampshire residents who spend their last days at home by 20% (from a 1991 baseline of 34.9%).

Priority Objective 15:

All persons living with cancer shall have effective management of pain and other symptoms.

Strategies:

1. Increase New Hampshire's score on the Pain Policy Report Card by one full grade through advocating for the adoption of state pain policies that improve pain management for persons living with cancer.
2. Ensure all providers caring for persons living with cancer have current evidence-based information on symptom management.
3. Advocate for clinical trials of symptom management and palliative care.

"Great advances have been made in the detection and treatment of breast cancer, to the benefit of many survivors such as myself. Increased public awareness has played a significant role in this success. My hope is that the future will bring this same level of public awareness and research dollars to address cancers that are more difficult to detect and treat, particularly lung cancer."

Angela Greene

Emerging Issues

Emerging Issues

Goal: *Identify emerging issues and develop an action plan to benefit New Hampshire residents.*

In 2005, some 1.37 million new cases of cancer were diagnosed and about 570,000 Americans die dfrom cancer, according to the American Cancer Society[2]. Because one of the largest risks of cancer is age, cases are expected to rise as the number of older adults increases. In the past two decades, many exciting developments have occurred in the field of cancer research. The challenge is to speed the translation of this promising cancer research into practical methods for diagnosis and treatment.

In addition, as outlined in Part One, diversity and disparity is an emerging issue in the state. Attention must be paid to this challenge in all parts of the cancer plan.

One objective has been identified as a priority for emerging issues. Preliminary strategies for this objective have also been identified, and will be clarified and expanded by the workgroup as it begins the implementation process.

Priority Objective 16:

Increase public and provider awareness regarding emerging issues in New Hampshire.

Strategies:

1. Identify and promote existing national and local resources that contain evidence-based research information for providers and the public.
2. Eliminate disparities and barriers to cancer primary prevention, prevention and early detection, treatment and survivorship, and palliative care.
3. Continue to follow the National Cancer Institute study of factors that may be associated with the high incidence of bladder cancer in the New England Region.
4. Continue to follow the National Cancer Institute National Lung Screening Trial aimed at determining if either a spiral computed technology (CT) or a chest x-ray will detect lung cancer at an early, more treatable stage.
5. Continue to follow the cervical cancer vaccine clinical trial for prevention of cervical cancer.
6. Explore the emerging roles of innovative early breast cancer screening and evaluation with newer techniques (such as breast MRI) and high-risk genetic counseling.

Implementation

Since September 2004, more than 114 individuals from across New Hampshire have given their time and talents to complete the New Hampshire Comprehensive Cancer Plan. The most important determinant of the success of the cancer plan is the degree to which it is implemented and the objectives identified by the workgroups become realities. Crucial to achieving this success will be the sustainability of the New Hampshire Comprehensive Cancer Collaboration. It will be the responsibility of the New Hampshire Comprehensive Cancer Collaboration to ensure that the cancer control vision and mission are realized. To accomplish this, the plan and its activities must continue to have relevance and meaning to our partners. Critical to the success of implementation will be assessment, funding, coordination, and evaluation. In addition, to address the unequal burden of cancer, every attempt will be made during implementation to address the diverse and disparate population of the state.

Assessment

While some may assume that implementation of the plan will lead to new programs and services, the priority for comprehensive cancer control planning in New Hampshire is to coordinate and integrate what is already in existence throughout the state. Many of the strategies in this document address the need to determine what currently exists throughout the state and where there are any gaps before developing new programs or services. Conducting a Capacity and Needs Assessment should be an early step in the implementation process and will provide baseline information that will be used for evaluation purposes. While an inventory of many cancer control activities in the state was begun for planning purposes, an ongoing identification of organizations and programs will be undertaken.

Funding

Funding of the plan will be extremely critical to successful implementation. However, as The Centers for Disease Control and Prevention points out in its Guidance Document, this ongoing activity of mobilizing support involves more than merely securing funding. It requires a broad campaign that will provide visibility, develop political goodwill, and ensure funding for implementing portions of the plan.

Coordination

Finally, all of these efforts cannot be accomplished without coordination and communication. Successful implementation will depend on effective coordination and communication among the many committed organizations and individuals in New Hampshire. Developing a mechanism to communicate with partners about programs, resources, and best practices will assist with implementation of the plan. The New Hampshire Comprehensive Cancer Collaboration recognizes that continued collaboration building is essential to implementation of the plan.

Evaluation

The New Hampshire Comprehensive Cancer Collaboration will continually measure the effectiveness of the plan and its implementation by surveying the membership of the collaboration, using data and outcomes measurements, and incorporating new advances in the cancer continuum of care. In addition, identification of available resources to improve access to treatment and appropriate medical care, and advance the quality of life for New Hampshire citizens will be repeatedly assessed throughout the next five years.

References and Resources

Planning Workgroup Chairs

Breast Cancer Workgroup

Co-Chairs

Robert Lambert, M.D., F.A.C.S.
American College of Surgeons

Lise Mendham, M.P.H., R.N., O.C.N
Elliot Hospital

Colorectal Cancer Workgroup

Co-Chairs

Lynn F. Butterly, M.D.
Dartmouth-Hitchcock Medical Center
Norris Cotton Cancer Center

Joanne Gersten
American Cancer Society

Lung Cancer Workgroup

Co-Chairs

Douglas Weckstein, M.D.
New Hampshire Oncology-Hematology, P.A.

Marie Mulroy
NH Department of Health and Human Services

Palliation Workgroup

Chair

Don McDonah, M.D.
St. Joseph Hospital

Prostate Cancer Workgroup

Co-Chairs

Nancy Kane, R.N., M.S., A.O.C.N.
Payson Center for Cancer Care
Concord Hospital

William Santis, M.D.
Concord Hospital Urology Group
Payson Center for Cancer Care
Concord Hospital

Skin Cancer Workgroup

Co-Chairs

Shawn LaFrance
Foundation for Healthy Communities

Peter Sands, M.D.
Dartmouth-Hitchcock-Concord

Implementation Workgroup Chairs

Primary Prevention Workgroup

Co-chairs

Peter Ames, M.P.H.
American Cancer Society

John Schlegelmilch, M.D.
Cheshire Medical Center

Prevention and Early Detection Workgroup

Co-chairs

Lynn Butterly, M.D.
Dartmouth-Hitchcock Medical Center
Norris Cotton Cancer Center

Joanne Gersten, R.N., M.S.
American Cancer Society

Treatment and Survivorship Workgroup

Co-chairs

Lise Mendham, M.P.H., R.N., O.C.N.
Elliot Hospital

Lynne Graziano Morin
The Leukemia and Lymphoma Society

Palliation Workgroup

Co-chairs

Yvonne Corbeil
Dartmouth Medical School

Don McDonah, M.D.
St. Joseph Hospital

Emerging Issues Workgroup

Co-chairs

Karla Armenti, Sc.D.
NH Department of Health & Human Services

Sai Cherala, M.D., M.P.H.
NH Department of Health & Human Services

Cancer Workgroup Participants

Patti Baum
James Becht, M.D.
Ranae Beeker, R.N.
Debra Bernsten
Linda Bixby
Alice Bruning
Becky Bukowski
Katy Burdett
Matthew Cahillane
Kim Carole
Rosemary Caron
Paula Caron, A.R.N.P.
Lisah Carpenter
Maria Celaya
Sherry Cesati
Andrew Chalsma
David Chase
Donna Cliff
Margie Cole, M.S.W.
Nancy Collins
Margo Connors
Vi Constant
Helen Corbett, M.D.
Debbie Corrigan
Maureen Cullen
Jana Dalton
Edward P. Dalton, M.D., F.A.C.S.
Allen Dietrich, M.D.
Ken Dufault
Nancy DuMont
Lynn Durand
Jane Edmunds
Carol Elfring, R.N.
Claire Fauth
Vickie Fieler, R.N., M.S.
Mindy Fitterman
Diane Fitzgerald
Donna Fleming
Regina Flynn
John Gens
Madeline Gerken, M.D.
Amy Gilbert
Martha Goodrich
Rebecca Gray
Elizabeth Hale Campoli, R.N.
Jeffrey Harnsberger, M.D.
Ann Hebert, R.N.
Laura Holmes
Sue Holmes
Robyn Housemann
Matthew Hudson, Ph.D.
Denise Jeffery
Nancy Leigh Johnson, R.N.
Margaret Karagas, Ph.D.
Christine Kastel
Roxanne Kate, R.N.
Joan Kellenberg
Barbara Kimball
Deborah Kimball
Richard Knab
Susan Knight
Susan Kuhn
Kathy Lavigne
Kimberly Leets
Russell Leshne
Henry Lipman
Gail Machialitis
Claudia Mahar
Janet Maher
Rhonda Martin
Gail Matthews
Melissa McAllister
MaryAnne Mercier, R.N.
Heather Merrill
Sally Minkow
Paula Minnehan
Jazmin Miranda-Smith
Jim Murphy
Judy Murphy
Margaret Murphy
Mary Palmer
Donald Parker
Wendy Parker
Tim Parsons
Paula Plona, M.S.S.A.
Tony Poekert, M.S.
Vi Pollock
Larry Ponce
Tom Prugar
Judy Rees, M.D.
Lisa Richards
June Robinson, M.D.
Stefan Russakow
Nancy Ryan
Vivek Samnotra, M.D.
Timothy Scherer, M.D.
Mary Scott, R.N.
Radia Sefiane
Vickie Shallow
Judith Silveira
Stacey Smith
Diane Smoger
Lori St.Jacques, R.N.
Linda Taylor
Merle Taylor, R.N.
Johane Telegrane
Pat Thayer, R.N.
Neil Twitchell
Barbara Umansky, M.S.W.
Larry Vailancourt
Rita Vied, R.N., B.S.H.S, O.C.N.
Bill Walker
Patricia Wentworth
Mollie White
Craig Whitney
Rick Wold

Additional Objectives and Strategies

Primary Prevention

- Increase the number of smokers who seek preventive health care from 65% to 80%.
- All New Hampshire hospitals shall provide evidence-based UV light exposure risk factor information to parents of newborn infants.
- Work with the NH Department of Education to identify a curriculum on ultraviolet light exposure for high school students including the risk of indoor tanning.

Screening and Early Detection

- Advocate for a concise and comprehensive message for the early detection of breast cancer.
- Information relative to individual risk shall be disseminated into the public domain including the following information:
  - The majority of all new cases of breast cancer have no known risk factor;
  - A small minority of new breast cancer cases can be traced to a family history;
  - Awareness among men that the BRCA2 mutation in their family increases their risk.
- All mammography units operating in New Hampshire shall be certified by the Mammography Quality Standards Act.
- Seventy-five percent of primary care providers shall be reached by a system for disseminating current research on screening for Prostate Cancer in a format that meets their needs.
- New Hampshire shall determine the baseline number of high-risk men older than the age of 45 screened for prostate cancer.
- New Hampshire shall identify barriers to screening in the high-risk population for prostate cancer.

Treatment and Survivorship

- New Hampshire shall develop informed treatment decision resources for individuals diagnosed with cancer.
- New Hampshire shall disseminate information on cancer decision-making at all points of entry into the cancer-care system for individuals diagnosed with cancer.

Palliation

- Ensure men with late-stage prostate cancer and their providers have access to evidence-based information on the variety of treatments and palliative approaches to their care.

Emerging Issues

- Promote better understanding of genetic testing for cancer and work towards ensuring that test results are kept confidential.
- Increase the number of high-risk individuals in clinical trials for screening for lung cancer.
- Create public awareness on the need to reduce exposure to environmental carcinogens.
- Decrease the proportion of indoor workspaces and homes that have indoor radon levels in excess of the U.S. Environment Protection Agency action guideline.
- Increase the knowledge regarding environmental causes of cancer.

Data Sources

This plan relies on a number of data sources to support its analysis and recommendations. Incidence data on cancer in New Hampshire, 1997-2001, are acquired by the New Hampshire State Cancer Registry and summarized by the New Hampshire Department of Health and Human Services. Mortality data on cancer in New Hampshire come from the Department of State, Vital Records Administration, and summarized by the New Hampshire Department of Health and Human Services. National data come from the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute, an authoritative source of information on cancer incidence and survival in the United States. The SEER Program currently collects and publishes cancer incidence and survival data from 14 population-based cancer registries and three supplemental registries covering approximately 26 percent of the US population. Information on more than 3 million in situ and invasive cancer cases is included in the SEER database, and approximately 170,000 new cases are added each year within the SEER coverage areas. For all the comparisons, the same time span as state data was used, 1997-2001, and the racial categorization of white was used. The numbers reported here came from SEER Cancer Statistics Review 1975-2001. In addition, the Behavioral Risk Factor Surveillance Survey (BRFSS) data is utilized in the plan. The BRFSS tracks health risks in the United States at a state level including those risks that affect cancer.

SEER Summary Staging

Summary staging is the most basic way of categorizing how far a cancer has spread from its point of origin. Summary staging uses all information available in the medical record; it is a combination of the most precise clinical and pathological documentation of the extent of disease.

There are five main categories in summary stage. In addition, the regional stage is subcategorized by the method of spread. The code structure is:

Code	*Definition*
0	**In situ** The technical definition of in situ is the presence of malignant cells within the cell group from which they arose. There is no penetration of the basement membrane of the tissue and no stromal invasion.
1	**Localized only** A localized cancer is a malignancy limited to the organ of origin; it has spread no farther than the organ in which it started.
2	**Regional by direct extension only** Invasion through entire wall of organ into surrounding organs and/or adjacent tissues.
3	**Regional lymph nodes involved only** Tumor invasion of walls of lymphatics where cells can travel through lymphatic vessels to nearby lymph nodes where they are "filtered" out and begin to grow in the nodes.
4	**Regional by BOTH direct extension AND lymph node involvement** A combination of direct extension and lymph node involvement.
5	**Regional, NOS (Not Otherwise Specified)** This category may be used when it is unclear whether the tissues are involved by direct extension or lymph nodes, or when the other categories are not applicable, such as for staging Non-Hodgkin and Hodgkin lymphoma of more than one lymph node chain.
7	**Distant site(s)/node(s) involved** Distant metastases are tumor cells that have broken away from the primary tumor, have travelled to other parts of the body, and have begun to grow at the new location. Cancer cells can travel from the primary site in any of four ways: • Extension from primary organ beyond adjacent tissue into next organ. • Travel in lymph channels beyond the first (regional) drainage area (distant lymph nodes). • Hematogenous or blood-borne metastases. • Spread through fluids in a body cavity.
9	**Unknown if extension or metastasis (unstaged, unknown, or unspecified)** Death certificate only case.

Source: Young JL Jr, Roffers SD, Ries LAG, Fritz AG, Hurlbut AA (eds). SEER Summary Staging Manual - 2000: Codes and Coding Instructions, National Cancer Institute, NIH Pub. No. 01-4969, Bethesda, MD, 2001.

Cancer Prevention and Screening Guidelines Sources

American Cancer Society
360 Route 101, Unit 8
Bedford, NH 03110
Telephone: 1-800-ACS-2345
Website: http://www.cancer.org

American Lung Association
1740 Broadway
New York, NY 10019
Telephone: 212-315-8700
Website: http://www.lung.usa.com

American Gastroenterological Association
7910 Woodmont Avenue, 7th Floor
Bethesda, MD 20814
Telephone: 301-654-2055
Website: http://www.gastro.org

American Association of Dermatology
930 N. Meacham Road
Schaumburg, IL 60173
Telephone: 847-330-0230 or 888-462-337
Website: http://www.aaad.org

American College of Surgeons (ACoS)
Commission on Cancer
633 North Saint Clair Street
Chicago, IL 60611
Telephone: 312-202-5000
Website: http://www.facs.org

American Society of Clinical Oncology (ASCO)
1900 Duke Street, Suite 200
Alexandria, VA 22314
Telephone: 703-299-0150
Fax: 703-299-1044
Website: http://www.asco.org

Cancer Information Service-New England
55 Church Street, Suite 400
New Haven, CT 06510
Telephone: 203-865-2655
Website: http://www.cancer.org/CIS

Centers for Disease Control and Prevention (CDC)
Division of Cancer Prevention and Control
1600 Clifton Road, NE
Atlanta, GA 30333
Telephone: 404-639-3311 or 800-311-3435
Website: http://www.cdc.gov

Agency for Health Care Research and Quality
Guide to Clinical Preventive Services
540 Gaither Road
Rockville, MD 20850
Telephone: 301-427-1364
Website: http://www.ahrq.gov/clinic/cps3dix.htm

National Cancer Institute (NCI)
Surveillance Epidemiology and End Results Program (SEER)
Executive Plaza North, 343J
9000 Rockville Pike
Bethesda, MD 20892
Telephone: 301-496-8510 or 1-800-877-1319
Fax: 301-402-0816
Website: http://www.seer.ims.nci.nih.gov

National Comprehensive Cancer Network
50 Huntington Pike, Suite 200
Rockledge, PA 19046
Telephone: 888-909-6226
Fax: 215-728-3877
Website: http://www.nccn.org

[1] New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Disease Control and Health Statistics, Health Statistics and Data Management Section and New Hampshire State Cancer Registry, http://www.dhhs.state.nh.us/DHHS/HSDM/default.htm & http://www.dartmouth.edu/~nhscr/

[2] American Cancer Society. Cancer Facts & Figures 2005, http://www.cancer.org/downloads/STT/CAFF2005f4PWSecured.pdf

[3] U.S. Census Bureau, Census 2000, http://factfinder.census.gov/

[4] New Hampshire Office of Energy and Planning, http://www.nh.gov/oep/programs/DataCenter/Library.htm

[5] Centers for Disease Control and Prevention, United States Cancer Statistics, 2001 Incidence and Mortality, http://www.cdc.gov/cancer/npcr/uscs/index.htm

[6] Endowment for Health. Issue brief: Social-Cultural Barriers to Accessing Health 2002. http://www.endowmentforhealth.org/theme_social/_docs/4.pdf

[7] New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Community Health Services, Community Health Development Section, Rural Health and Primary Care Unit. New Hampshire Rural Health Report, 2004, http://www.dhhs.nh.gov/DHHS/RHPC/LIBRARY/Data-Statistical+Report/rural-health-report.htm

[8] American Cancer Society. Cancer Prevention & Early Detection Facts & Figures 2005, http://www.cancer.org/downloads/STT/CPED2005v5PWSecured.pdf

[9] Surveillance, Epidemiology, and End Results (SEER) Program, SEER*Stat Database: Incidence – SEER 9 Regs Public-Use, Nov 2004 Sub (1973-2002), National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch, released April 2005, based on the November 2004 submission, http://seer.cancer.gov/csr/1975_2001/index.html

[10] Surveillance, Epidemiology, and End Results (SEER) Program, SEER*Stat Database: Mortality – All COD, Public-Use With State, Total US (1969-2002), National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch, released April 2005. Underlying mortality data provided by NCHS, http://seer.cancer.gov/csr/1975_2001/index.html

[11] U.S. Department of Health and Human Services. Steps to a Healthier US: A Program and Policy Perspective (Prevention Portfolio), http://www.healthierus.gov/steps/summit/prevportfolio/strategies/addressing/school/critical.htm

[12] Youth Risk Behavior Surveillance –United States 1999, http://www.cdc.gov/mmwr/preview/mmwrhtml/ss4905a1.htm

[13] Behavior Risk Factor Surveillance System for New Hampshire, 1999.

[14] Behavioral Risk Factor Surveillance System for New Hampshire, 2003.

[15] Behavioral Risk Factor Surveillance System for New Hampshire, 2004.

[16] 2004 New Hampshire Youth Tobacco Survey, New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Prevention Services, Tobacco Prevention and Control Program, http://www.dhhs.state.nh.us/DHHS/ATODPREVENTION/TPCP.htm

[17] Pain and Its Treatment in Outpatients with Metastatic Cancer. Cleeland CS, Gonin R, et al. N Engl J Med 1994; 330: 592-596.

[18] Symptoms and Suffering at the End of Life in Children with Cancer. Wolfe J, Grier HE, Klar N, et al. N Engl J Med 2000; 342: 326-333.

New Hampshire
COMPREHENSIVE
CANCER
COLLABORATION

This publication was supported in part by Grant Number U55/CCU121912-04 from the National Comprehensive Cancer Control Program at the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the contributing authors and do not necessarily reflect the official views of the National Comprehensive Cancer Control Program at the Centers for Disease Control and Prevention.