Dear Comprehensive Cancer Collaboration Partners,

The New Hampshire Department of Health and Human Services, Division of Public Health Services is pleased to support the launch of the 2015-2020 New Hampshire Comprehensive Cancer Control Plan. Since 2005, cancer has been the leading cause of death accounting for approximately 25% of all deaths in New Hampshire. Through the combined efforts of our partners we have made great progress in cancer prevention and control activities throughout the state. The New Hampshire Comprehensive Cancer Collaboration (NH CCC) has been instrumental in working to align activities across partner organizations and to develop a shared agenda. As we continue to implement the activities of this plan it is imperative that we focus on health disparities and improving the health of all our residents.

Overall, Granite Staters are healthy but significant differences are found among disparate populations. To reduce the cancer burden for all New Hampshire residents we must take a population based approach reflecting the factors outside the clinical health care system that significantly impact health. The strategies of this plan have been aligned with the State Health Improvement Plan when appropriate. There are specific strategies that are designed to address and improve health equity. By using the plan to coordinate a collective impact approach, across the cancer continuum, we aim to improve population health and create a culture of cancer prevention and control that reaches all NH residents regardless of age, income, race, ethnicity, gender, and geographic status.

This plan would not be possible without the members of the NH CCC, their respective organizations that support their participation in the Collaboration, and other subject matter experts who have dedicated their time to selecting objectives, gathering data, discussing strategies, and developing this plan. Your time and efforts are sincerely appreciated.

I look forward to the implementation of the plan and our continued work together to accomplish our goals and reduce the burden of cancer in our state.

Sincerely,

José Thier Montero, MD, MHCDS
Director

The Department of Health and Human Services' Mission is to join communities and families in providing opportunities for citizens to achieve health and independence.
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Photo Credit: NHDTTD/Ayaz Asif
Balloon ascents over the Suncook River in the early morning hours at the Pittsfield Balloon Rally
Introduction

The New Hampshire Comprehensive Cancer Collaboration (NH CCC) is a partnership of individuals and organizations working together to eliminate cancer, the leading cause of death in the state.¹ The vision of the NH CCC is for cancer incidence, morbidity, and mortality to be significantly reduced or completely eliminated and for the people of New Hampshire to enjoy a healthy quality of life.

The Centers for Disease Control and Prevention (CDC) defines cancer control as, a process through which communities and partner organizations pool resources to reduce the burden of cancer and align efforts to reduce cancer risk.² This alignment works to prevent cancer, find cancers earlier, improve treatments, increase the number of cancer survivors and improve quality of life for them. This alignment is replicated by states as well as several Indian Tribes and US Territories through the development and implementation of state cancer plans.

This year marks the 10 year anniversary of the first New Hampshire Cancer Plan. Achievements of the NH CCC are due to leadership and support from the New Hampshire Department of Health and Human Services, Division of Public Health Services (NH DHHS, DPHS), the NH CCC, board members, a strong volunteer-based leadership team and members of the collaboration with support of their respective organizations, as well as many local, state, and national partners. For a disease as complicated and far-reaching as cancer, one person, one team, or even one organization cannot hold all the answers. But together, our potential is boundless.

As we look back on past accomplishments it is evident that the work of the NH CCC has strengthened relationships across the cancer continuum to improve health outcomes. The collaboration addressed cross cutting issues including communications, dissemination of evidence-based interventions and quality of cancer care. Surveillance, epidemiology, evaluation, and subject matter expertise continues to be provided by the NH DHHS, DPHS. With the advent of health reform and the transformational changes occurring within the health care sector, the public-private role of the NH CCC is critical in order to attain the intended benefits of these changes. Moving forward the NH CCC will emphasize the importance of strategies that provide the broadest impact through policy, environmental, and systems changes.
Public Policy Education Committee
The collaboration has convened policy advocates to work synergistically in monitoring legislation, supporting evidence based cancer prevention legislation, garnering letters of support and testimony from partners.

Primary Prevention
Members assisted strengthening of the 2007 Indoor Smoking Act, RSA 155:66, which expanded the smoking prohibition to restaurants and cocktail lounges. In 2011 they supported tobacco taxation efforts which resulted in a 29 percentage point tax increase of “other tobacco products”, such as chewing tobacco and snus. To prevent overweight and obesity the collaboration supported the work of Healthy Eating Active Living, NH in their implementation of the state-wide obesity prevention plan. To reduce adolescent exposure to ultraviolet radiation the NH CCC and partners proposed state law to ban the use of indoor tanning devices by children under the age of 18, added an indoor tanning question to the Youth Risk Behavior Surveillance System (YRBSS), and collaborated with the Melanoma Foundation of New England and others to discourage teen indoor tanning and change high school and college age tanning norms.

Prevention and Early Detection
Members served as an advisory board to the state Breast and Cervical Cancer and Colorectal Cancer Screening Programs. Collaboration workgroup members developed a cancer specific Affordable Care Act Resource to provide information on enrollment and verification of covered cancer screenings. A $3.5 million CDC grant was awarded to NH CCC partners at Dartmouth-Hitchcock who had demonstrated capacity via the CCC and ability to implement a colorectal cancer screening program. Workgroup members advocated for a state added Behavioral Risk Factor Surveillance System (BRFSS) prostate screening/shared decision making question and the Colorectal Screening Program paid for additional colorectal cancer screening questions and question intervals to increase surveillance capacity and monitor program effectiveness.

Treatment and Survivorship
Members worked to increase access to cutting-edge cancer treatment by identifying and addressing barriers to clinical trial enrollment in New Hampshire. A group of clinical trial coordinators from the Cancer Centers were convened for the first time and they mapped out the location, contact information, and available clinical trials in NH that will be kept updated on the NH CCC’s website. Member organizations developed a treatment summary and customizable survivor care plan to help improve the quality of life for cancer survivors. Members of the Palliation workgroup have worked to enhance data systems to help develop a baseline of knowledge about access to these important services throughout the cancer treatment process. They worked with University of New Hampshire (UNH) students to identify gaps and propose solutions to meeting spiritual care needs of patients.

NH CCC Accomplishments
In recent years the NH CCC had a variety of achievements across the cancer continuum.

Photo Credit: NHDTTD/Anita Meissnitzer – Covered bridge at the Wentworth Gold Club in Jackson, NH
Burden Summary

The burden data reported in this section is only from New Hampshire from the 2006-2010 Cancer Burden Report unless otherwise noted. BRFSS data, which is self-reported, is from 2012 unless noted.

Since 2005, cancer has been the leading cause of death overtaking heart disease, and it accounts for approximately 25% of all deaths in New Hampshire.¹ According to the American Cancer Society, one in two men and one in three women will develop cancer at some point in their lives. Approximately 7,500 people are diagnosed with cancer every year in New Hampshire. The overall cancer incidence rate has been stable during this period.³

Demographics

New Hampshire’s population in 2013 is estimated to be just over 1.3 million.⁴ Like the rest of the nation, the population is aging. In 2013, people age 65 and older account for 15.4% of the state’s population.⁵ As populations age, the risk of cancer increases, so it is reasonable to assume that we may see changes in cancer prevalence reflected by these demographic changes. Our population is primarily white (94%) however, the state is becoming more racially and ethnically diverse primarily in the larger population centers. Given that, this Burden Summary section compares New Hampshire mortality and incidence rates to the national rates of the white population.
Morbidity and Mortality

The overall age-adjusted cancer incidence rate was significantly higher than the national rate (508 vs. 480 per 100,000 population). Some site-specific cancer incidence rates were significantly higher than corresponding US white rates in both males and females.  

*Designates that the difference is statistically significant.

Figure 1: Top 10 invasive cancer sites by incidence rate for male residents.

Figure 2: Top 10 invasive cancer sites by incidence rate for female residents.

The overall age-adjusted cancer mortality rate was not significantly different from the national rate (174 vs. 176 per 100,000 population). Some site-specific cancer mortality rates were significantly different from corresponding US white rates in both males and females.  

*Designates that the difference is statistically significant.
Lung Cancer

Lung cancer was the most commonly diagnosed cancer and the leading cause of cancer deaths of cancers that affect both men and women. Lung cancer is responsible for the death of more people than the next three most common cancers combined (colon, breast, and prostate). The incidence of lung cancer was significantly higher than the national rate during the same time period (70 vs. 61 per 100,000). During this time 5,097 new cases of lung cancer were diagnosed and 3,537 people died from lung cancer. Seventy two percent of these lung cancer cases were diagnosed at a late stage when treatment is less effective, which contributed to lung cancer being the most deadly cancer in our state.³
Breast Cancer

Breast cancer is the most commonly diagnosed cancer and the second leading cause of cancer deaths among females. The incidence rate is similar to the national rate (132 vs. 131 per 100,000). During this period a total of 5,250 new cases were diagnosed and 865 women died from breast cancer.\(^3\)

Because prognosis of breast cancer is better when detected early, screening is an important tool. Eighty percent of women between age 40 and 74 years reported that they had a mammogram in the past two years. However, broken down by income level, clear disparities emerged. While nearly 89% of New Hampshire women of the highest income levels (>$50,000/year) reported that they had a mammogram in the past two years, that percent significantly dropped to 68% in the lowest income level (<$15,000/year).\(^6\) Due to our overall high breast cancer screening rates, 74% of all breast cancer cases were diagnosed in the early stage.\(^3\)

![Figure 5: Mammography Screening by Income Women age 50-74](image)

*The only statistically significant difference in mammography screening was between women with a household income less than $15,000 and $50,000 or more.

Prostate Cancer

Prostate cancer is the most commonly diagnosed cancer and second leading cause of cancer deaths among men. The incidence rate is similar to the national rate (158 vs. 155 per 100,000). During this period a total of 5,554 new cases were diagnosed and 605 men died from prostate cancer.\(^3\)

Eighty one percent of prostate cancer diagnoses were made at the localized stage. Only 31% of men age 40 and older reported having ever discussed the advantages and disadvantages of prostate cancer screening test (PSA test) with their healthcare provider. About 43% of men in the same age group reported having PSA test in the past 2 years.\(^3,6\)

Colorectal Cancer

Colorectal cancer is the second most commonly diagnosed cancer and second leading cause of cancer deaths in the combined male-female population. The incidence rate of colorectal cancer was similar to the national rate (42 vs. 43 per 100,000). During this period, a total of 3,068 new cases were diagnosed and 1,084 people died from colorectal cancer in NH. According to national data, the 5-year relative survival rate of colorectal cancer was 65% during this time.\(^3\)

Colorectal cancer is one of the few cancers that can be prevented through screening. The small growths of polyps, from which most colon cancers develop, can be detected and removed during a colonoscopy. About 75% of adults between age 50 and 75 years were up-to-date with colorectal cancer screening.\(^6\)
When the numbers were broken down by income or by education, clear disparities emerged. Nearly 80% of residents of the highest income (> $50,000/year) reported that they were up to date with colorectal cancer screening, however that percent significantly dropped to 61% in the lowest income level (< $15,000). Nearly 80% of residents of the highest education status (graduated from college or technical school) reported that they were up to date with colorectal cancer screening, however that percent significantly dropped to 66% in the lowest education status (did not graduate high school).7

![Figure 6: Met colorectal screening by income (both men and women)](image)

*Having a household income of $50,000 or more was statistically significantly different from household income of $25,000-$34,999, $15,000-$24,999, and less than $15,000. The greatest disparity was between household incomes of $50,000 or more and those of $15,000.

![Figure 7: Met current colorectal screening by education status (both men and women)](image)

*Graduating from high school and having a high school diploma or GED were statistically significantly different from graduated from college or technical school.
Melanoma

Melanoma was the fourth most commonly diagnosed cancer among those that affect both male and female. The incidence rate of melanoma was similar to the national rate (27 vs. 28 per 100,000). During this period a total of 1,973 new cases were diagnosed and 201 people died from melanoma. According to national data, the 5-year relative survival rate of melanoma is 91% and about 85% of melanoma cases were diagnosed at an early stage.\(^3\)

Cervical Cancer:

A total of 202 invasive cervical cancer cases were diagnosed and 78 women died from cervical cancer in NH. Cervical cancer accounts for less than one percent of all cancer incidence and all cancer mortality among females. The incidence rate of cervical cancer in NH was similar to the national rate (5.6 vs. 6.6 per 100,000).\(^3\)

Cervical cancer can also be prevented through screening. Eighty seven percent of women between age 21 and 65 reported that they had a Pap test within the past three years. In 2012, 4% of females between age 21 and 65 years-old had never had a Pap test.\(^6\) When broken down by income level, clear disparities emerged. While 92% of women of the highest income level (>\$50,000/year) reported having a Pap test, that percent significantly dropped to 72% in the lowest income level (<\$15,000/year).

For more information please see the NH Cancer Report 2006-2010.\(^3\)
The Plan Framework

The 2015-2020 Cancer Plan reflects the ongoing growth and development of NH CCC and captures an important change in focus. Moving forward, collaboration members will work collectively via policy, systems, and environmental changes on objectives in this plan by assessing current needs, building on accomplishments, selecting evidence based strategies, addressing health disparities, sharing best practices, and using a data driven approach to reduce the burden of cancer for all.

The aim of the Cancer Plan is to prevent and control cancer through policy, systems and environmental approaches using the Social Ecological Model as a framework. This model acknowledges that individuals are impacted by the culture and environment found in their organizations, community, and broader public policy. Strategies contained in this plan should address multiple levels of the model to sustain prevention efforts over time. By using this framework we aim to improve population health and create a culture of cancer prevention and control that reaches all NH residents regardless of age, income, race, ethnicity, gender, and geographic status.

The objectives in the plan aim to impact population health and improve health equity. Objectives and their related strategies and activities are designed to influence interrelated factors and to work across the cancer continuum to make the largest impact. Population health happens across the lifespan and interventions, especially to prevent cancer, will begin at an early age.
In early 2014 the NH CCC Board convened a Steering Committee to begin revising the cancer plan. The Board and Steering Committee recognized that to make the greatest impact the plan would take a population based approach to reduce cancer using evidence based policy, systems, and environmental strategies whenever possible with a focus on reducing health disparities and improving health equity.

The National Cancer Institute defines cancer health disparities as adverse differences in cancer incidence (new cases), cancer prevalence (all existing cases), cancer death (mortality), cancer survivorship, and burden of cancer or related health conditions that exist among specific population groups. These population groups may be characterized by age, disability, education, ethnicity, gender, geographic location, income, or race. People who are poor, lack health insurance, and are medically underserved (have limited or no access to effective health care)—regardless of ethnic and racial background—often bear a greater burden of disease than the general population. Healthy people 2020 defines health equity as the “attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities.”

The Steering Committee drafted three broad goals along the cancer continuum using national guidance and previous plan iterations. Ad hoc groups made up of current NH CCC members and subject matter experts were convened to select plan objectives that they and their organizations felt they had capacity and desire to address. Objectives that are developmental require the identification or creation of baseline data.

Objectives were selected using the following criteria:

- Reach of the strategy;
- Adequacy of resources to make an impact;
- Potential to leverage existing efforts within NH CCC or partner organizations;
- Evidence base or best practices exist that address the issue;
- Will address health equity [and are designated with this symbol (HE)]
Implementation of objectives is woven into the plan through a reporting structure that includes timely updates about which objectives have been achieved, which activities have succeeded, which need to be revised or removed. During the period of the plan, strategies and their related activities will be added, revised, and updated to ensure a dynamic plan that evolves with achievements, changes in screening guidelines, new evidence, healthcare reform, and resources.

The goals of the 2015-2020 Plan align with the CDC Health Impact Pyramid. The pyramid was used as a framework to guide cancer prevention and control to interventions at the bottom of the pyramid in order to achieve the greatest impact. Goal One, to foster communities and systems that reinforce healthy lifestyles will be achieved by changing the community context so that default decisions are healthy. Goals Two and Three are long lasting interventions that prevent and control cancer. Goals Two and Three use health system approaches to ensure that the interventions are long lasting and become part of the organizational culture.

![CDC Health Impact Pyramid](image)

In order to effectively implement this plan, a collective impact approach should be taken. The NH CCC engages members from a wide variety of sectors who work together to implement the Plan. The NH CCC works in partnership with the NHDHHS, DPHS Comprehensive Cancer Control Program leverages national resources, supports implementation, evaluation and provides on-going monitoring of the plan.

Through the work plans developed under the broad goals, activities will be added under each objective. The activity will identify an evaluation component. As work plans are being implemented, data being collected to evaluate progress will be updated as part of an ongoing process. Evaluation resources from the DPHS will be utilized to develop evaluation measures, advice on feasibility of data collection, and availability of data.
Goal 1: Foster communities and systems that support and reinforce healthy lifestyles.

There is ongoing research that confirms the link between health status and where people live. Poverty, access to healthy food, opportunities for physical activity, access to healthcare, transportation, child care, employment, and receiving information in a persons’ own language, all impact how much influence a person has on their own health. Communities that support and reinforce healthy lifestyles will have better health outcomes for their community members. The NHCCC will focus efforts on making change through public policy as well as community and organizational systems change.

TOBACCO

**Objective 1**

*Increase direct funding for statewide comprehensive tobacco prevention and control services to the CDC recommended level.*

Baseline: $125,000 per year

Target: CDC recommended level of $16.5m.

**Objective 2**

*Decrease the percentage of NH adolescents who report tobacco use in the past 30 days.*

Baseline: 14% (YRBS, 2011)

Target: TBD
Objective 3

Decrease the percentage of NH adults who report currently smoking cigarettes. Baseline: 16.2% (BRFSS, 2013). Target: 12%

Objective 4

Reduce the percentage of NH children and adults who report being exposed to secondhand smoke. Baseline: 3.8% (National Survey of Children’s Health, NH data, 2011/12). Target: 3.0%

Objective 5

(Developmental) Increase the percentage of NH health care centers that report having a system in place to assist smokers with tobacco treatment. Baseline: To be determined.

OBESITY

Objective 6

(Developmental) Increase synergistic and targeted work with Healthy Eating Active Living (HEAL) NH in HEAL defined Communities of Need to prevent cancer. Baseline: To be determined.
HUMAN PAPILLOMAVIRUS (HPV) VACCINE

Objective 7

Increase the percentage of NH youth who complete the recommended HPV vaccination series.

Baseline: 43% in girls, 18% in boys
(National Immunization Survey, NH Data, 2013).

Target: 75% in girls and 30% in boys

CDC estimates that increasing HPV vaccination rates to 80% would prevent an additional 53,000 future cervical cancer cases. (President's Cancer Panel Annual Report 2012-2013)

BREASTFEEDING

Objective 8

Increase the percentage of low income NH women who initiate and continue breastfeeding.

Baseline: Initiation 71.7% (Pediatric Nutrition Surveillance System, PedNSS, 2011)
Target: 75%

Baseline: Breastfeed for 6 months, 22%, and 12 months, 15% (PedNSS, 2011)
Target: 25% and 15% respectively.

Baseline: Exclusive at 3 months, 22.9% and 6 months, 8.8% (PedNSS, 2011)
Target: 25% and 12% respectively.
SUN SAFETY

Objective 9

Reduce the percentage of NH teens who report indoor tanning.
Baseline: 13.5% girls, 3.8% boys (YRBS, 2013)
Target: 13% girls, 3% boys

Objective 10

(Developmental) Increase the percentage of NH worksites, schools, municipalities and recreational programs that have sun safety policies.
Baseline: To be determined.

Goal 2: Prevent and detect cancer at its earliest stage.
Screening at appropriate intervals can help to prevent and detect some types of cancer (e.g., breast, cervical, colorectal and lung) before they cause symptoms. Finding cancer at the earliest stage allows doctors to provide the most effective treatment, which should lead to reduced cancer morbidity and mortality. Despite increased access to health insurance and coverage for preventive screenings, disparities remain in screening rates among NH residents. In order to ensure health equity the NH CCC is focused on improving health systems to support these services, navigate patients and improve community-clinical linkages.
Objective 1

Increase percentage of NH adults who receive screening for colorectal, cervical, and breast cancer based on the most recent US Preventive Services Task Force (USPSTF) guidelines, with an emphasis on populations experiencing disparities.

Colorectal Cancer Screening
Baseline: 75% (BRFSS, 2012)
Target: 80%
NOTE: Age 50-75 with FOBT (fecal occult blood test) within the past year; or flexible sigmoidoscopy within the past 5 years and FOBT within the past 3 years; or colonoscopy within the past 10 years

Cervical Cancer Screening
Baseline: 87% (BRFSS, 2012)
Target: To be determined.
NOTE: The baseline data refers to women age 21-65 who received a Pap test in the previous three years, this does not reflect the current US Preventive Services Task Forces (USPSTF) recommendation. The target will be established after determining a new baseline after the addition of an item to BRFSS that captures whether a woman had an HPV test in conjunction with her Pap test.

Breast Cancer Screening
Baseline: 85% (BRFSS, 2012)
Target: 89%
NOTE: Women age 50-75 reported having a mammogram within the past two years

Objective 2

(Developmental) Increase access to informed and shared decision making for cancer screenings
Baseline: To be determined.

Shared decision making is a collaborative process that allows patients and their providers to make health care decisions together, taking into account the best scientific evidence available, as well as the patient’s values and preferences. (Informed Medical Decisions Foundation)
Goal 3: Optimize quality of life for those affected by cancer.

Improving the health and well-being of cancer patients, their families and caregivers begins at the time of diagnosis and continues across the natural trajectory of the disease. Work on this goal will focus on improving access to high quality health services through policy, system and environmental strategies that promote access to comprehensive and cutting-edge treatment. Strategies will need to be data-driven and may require considerable efforts to identify and utilize existing data, develop new data and identify disparities.

Objective 1

(Developmental) Improve access to quality; diagnostic and treatment services, clinical trial/research, and palliative care for all citizens of NH. HE

Baseline: To be determined.

Objective 2

(Developmental) Increase availability and access to systems that provide relevant, evidence based and/or recommended survivorship programs and services designed to improve quality of life. HE

Baseline: To be determined.

Objective 3

(Developmental) Increase access to quality end of life care. HE

Baseline: To be determined.
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New Hampshire Division of Travel and Tourism (NHDTTD)/Ayaz Asif, Table of Contents Page – Balloon ascents over the Suncook River in the early morning hours at the Pittsfield Balloon Rally.

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NHDTTD/Anita Meissnitzer, Page 2 – Covered bridge at the Wentworth Gold Club in Jackson, NH

NHDTTD/Jen Drociak, Page 10 – East Manchester Skyline at Sunset, Manchester, NH

Ashley Conley, Page 13 – City of Nashua, Nashua, NH

1 Office of Health Statistics and Data Management Section (HSDM), Division of Public Health Services (DPHS), New Hampshire Department of Health and Human services (NH DHHS), Office of Medicaid Business Policy (OMBP) and the New Hampshire Department of State, Division of Vital Records Administration. 2014


7 Adapted from the CDC social ecological model national Breast and Cervical Cancer Early Detection Program.