

MAINE COMPREHENSIVE CANCER CONTROL PLAN
2011-2015



MAINE CANCER CONSORTIUM
OCTOBER 2010

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October 2010

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THE ACORN PLANTER

by Brian Cavanaugh, T.O.R., *The Sower's Seeds*

*In the 1930s a young traveler was exploring the French Alps.
He came upon a vast stretch of barren land.
It was desolate. It was forbidding. It was ugly.
It was the kind of place you hurry away from.*

*Suddenly, the young traveler stopped dead in his tracks.
In the middle of this vast wasteland was a bent-over old man.
On his back was a sack of acorns.
In his hand was a four-foot length of iron pipe.*

*The man was using the iron pipe to punch holes in the ground.
Then from the sack he would take an acorn and put it into the hole.
Later the old man said to the traveler, "I've planted over 100,000 acorns.
Perhaps only a tenth of them will grow."
The old man's wife and son had died, and this was how
he chose to spend his final years.
"I want to do something useful," he said.*

*Twenty-five years later the now-not-as-young traveler returned
to the same area. What he saw amazed him.
He could not believe his own eyes.
The land was covered with a beautiful forest, two miles wide and
five miles long. Birds were singing, animals were
playing, and wildflowers perfumed the air.*

*The traveler stood there recalling the desolation that once was.
A beautiful oak forest stood there now...*

...all because someone cared.





October 2010

Dear Mainers,

The Maine Cancer Consortium is pleased to present the *Maine Comprehensive Cancer Control Plan: 2011-2015*. This collaborative plan was created with the hope that we, together, can dramatically impact the cancer burden in Maine.

Approximately 8,650 Mainers will be diagnosed with cancer in 2010, joining the thousands that are currently living with the disease. Though significant advances have been made in detection, treatment, and survivorship care, there is still much to be done to lessen the impact cancer has on our state.

This document is the third edition of the *Maine Comprehensive Cancer Control Plan*, and reflects the emerging needs and issues in Maine's fight against cancer. The Maine Cancer Consortium, Maine's statewide cancer control partnership, offers this plan as a guiding document for prioritizing, integrating, and enhancing Maine's efforts across the cancer continuum.

Whether you are a cancer professional, government agency, non-profit, community organization, cancer survivor, friend, or family member, we invite you to partner with us as we work to achieve the goals set forth in the following pages, and ultimately improve the lives of all Mainers affected by cancer.

Thank you for using the *Maine Comprehensive Cancer Control Plan*, and in advance for your time, efforts, and energy dedicated to changing cancer in Maine.

Sincerely,

Eileen F. McDonald
Chair, Maine Cancer Consortium

Melanie Feinberg
Co-Chair, Maine Cancer Consortium

ACKNOWLEDGMENTS

The *Maine Comprehensive Cancer Control Plan: 2011-2015* was created by the Maine Cancer Consortium (MCC), an extraordinary group of dedicated and passionate individuals who generously volunteered their time and expertise to this effort. This document reflects their knowledge of, and experience with, the most important cancer issues facing Maine and its people.

A sincere thank you goes to the Maine Cancer Consortium Board of Directors. They have led Maine's comprehensive cancer control efforts through many opportunities and challenges, and because of their commitment, Maine has become a leader in comprehensive cancer control.

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The *Maine Comprehensive Cancer Control Plan: 2011-2015* could not have been developed without the diligence of the Maine Cancer Consortium's members and partners. This network of individuals represents the state's foremost experts in cancer prevention, detection, treatment, rehabilitation and survivorship, palliation and end-of-life care, data, and evaluation. They worked tirelessly to identify and synthesize what should be done to reduce the impact of cancer on Mainers over the next five years, and special appreciation is extended to these individuals. Their hard work and motivation provided the foundation for this document, and the work it inspires.

Additional thanks are extended to the following for their assistance in providing data analysis and support: RuthAnne Spence, PhD, and Melissa Furtado, MPH, of the Maine Center for Public Health; Molly Schwenn, MD, and the Maine Cancer Registry; and Kip Neale and the Behavioral Risk Factor Surveillance System.

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State cancer planning has become a national movement, and today, all states and several tribal and territorial organizations have developed a cancer plan. These collaborative efforts put forth by programs nationwide have informed the *Maine Comprehensive Cancer Control Plan: 2011-2015*, and we hope our plan can provide the same support and guidance for which we are grateful.

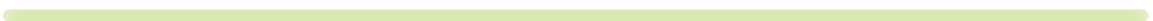
Lastly, special thanks are extended to Netta Apedoe, MPH, and Andrea Fletcher, MS, of the Maine Comprehensive Cancer Control Program, for their dedication to the development of this guiding document.



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EXECUTIVE SUMMARY

No matter how it is defined, the burden of cancer on Maine's people and communities is great, and a burden that Maine can no longer afford to bear. Each year, cancer costs approximately 3,100 Mainers their lives, and thousands more are left to shoulder the financial, physical, and emotional burdens of cancer.

A health problem so pervasive, costly, and complex can only be addressed by the coordinated effort of knowledgeable stakeholders across the state. The Maine Cancer Consortium, established in 1999, is a partnership of such stakeholders committed to reducing the burden of cancer in Maine. Every five years the Consortium works together to create a comprehensive cancer control plan for Maine, outlining the priorities for cancer statewide.

The goal of the *Maine Comprehensive Cancer Control Plan (Maine Cancer Plan)* is to promote and preserve the health and quality of life of the people and communities of Maine by minimizing the impact of cancer. This plan speaks to providers, community organizations, advocacy efforts, state and federal programs, policy makers, hospitals, survivors, families, and communities.

Section 1: Burden of Cancer in Maine describes how cancer affects Maine, citing data for burdens we can quantify, such as when people become sick or die from cancer. It also acknowledges the burdens we cannot quantify, including the ways cancer challenges individuals, families, and communities.

Section 2: Overarching Issues Affecting Cancer in Maine looks at issues that are common to all cancers and all aspects of the cancer continuum. Priorities and issues included in this section are interwoven and reflected throughout all sections of the plan:

- Public Policy, Legislation, and Funding
- Disparities
- Data and Surveillance.

Section 3: Affecting the Cancer Continuum looks at ways to make an impact on cancer at every point of the continuum. Topics in this section include:

- Primary Prevention
- Early Detection
- Treatment
- Rehabilitation and Survivorship
- Palliation and End-of-Life Care.

Section 4: Working Together to Change Cancer in Maine looks at the administration of the plan itself, covering the areas of:

- Implementation
- Communications
- Evaluation.

The *Maine Comprehensive Cancer Control Plan: 2011-2015* is a living document created to guide the work of the many organizations and people working to reduce Maine's cancer burden. It is the hope of the Maine Cancer Consortium that this plan will synthesize the passion, dedication, knowledge, and energy of all those invested and committed to cancer in Maine, and that together we can accomplish what none of us could do alone.





INTRODUCTION

Cancer in Maine

Cancer is costly to Maine. Economically, it drives up healthcare costs and steals the productivity of those who must focus on restoring their own health, or that of a loved one. It also costs too many Mainers their lives: about 3,100 Mainers die from cancer each year, making cancer the second leading cause of death in Maine.ⁱ

However, these are just the obvious costs. Each of the over 8,000 Mainers diagnosed with cancer every year knows there are also daily costs of cancer.ⁱⁱ The energy that would normally go to participating in civic and community life, nurturing and enjoying family and friends, volunteering, and creating everything from shops to gardens to new ways of solving problems, must now go to fighting a disease.

Cancer is complex. It is not a single disease, but a group of diseases that have in common only the dangerous growth of abnormal cells somewhere in the body. Each type of cancer – and there are over 100 types – has its own risk factors, disease progression, treatment, and odds for survival. Each type of cancer still has its own mysteries, too; researchers work continuously to understand the missing information that is the key to preventing, detecting, and treating cancer.

The Maine Comprehensive Cancer Control Program

A health problem so pervasive, costly, and complex can only be addressed by the coordinated effort of knowledgeable stakeholders across the state. Comprehensive cancer control is an integrated and coordinated approach to reducing the incidence, morbidity, and mortality of cancer through prevention, early detection, treatment, rehabilitation, survivorship, and palliation and end-of-life care. The Maine Comprehensive Cancer Control Program provides leadership for, and coordination of, Maine's statewide comprehensive cancer control efforts and is guided by the goals and objectives delineated in the *Maine Cancer Plan*. The objectives of the program are to (1) improve and expand the collaborative efforts already in place through the Maine Cancer Consortium among stakeholders working on cancer control in Maine; (2) increase the use of the *Maine Cancer Plan* as the statewide document directing cancer control efforts; (3) provide technical assistance to organizations working on state and local cancer control efforts; (4) conduct collaborative public awareness and education projects; and (5) evaluate the implementation of the *Maine Cancer Plan*.

The Maine Cancer Consortium

The Maine Cancer Consortium (“Consortium”), is a partnership of knowledgeable stakeholders, and includes organizations and individuals committed to reducing the burden of cancer in Maine. The Consortium was established in 1999 and obtained 501c3, or non-profit, organizational status in 2010. Since its founding, the Consortium has developed and implemented a series of five-year



plans to reduce the incidence and mortality of cancer and enhance the quality of life among all Mainers affected by cancer. This document is the third revision of this plan.

The mission of the Consortium is to reduce the burden of cancer in Maine by working collaboratively to optimize quality of life by improving access to care, prevention, early detection, treatment, rehabilitation, survivorship, palliation, and end-of-life care. Membership to the Consortium is open to anyone committed to furthering the mission. Representatives include those from public and private organizations involved in all aspects of cancer prevention, control, and care. An organizational chart of the Consortium can be found in Appendix A; a list of 2010 member organizations is provided in Appendix B.

The Consortium has accomplished much for Maine's fight against cancer. Here are some examples of recent accomplishments from the past plan's efforts:

Issue Visibility

- Radon testing and mitigation have become more commonplace.
- Sexually transmitted diseases (STDs) have been talked about more than in previous years. Genital human papillomavirus (HPV) information and screening recommendations have been disseminated at the National STD conference, as well as at National Breast and Cervical Cancer Early Detection Program conferences and meetings.
- More meetings convened with minority populations to identify disparities around end-of-life services and breast cancer; needs assessment done to identify barriers to colorectal cancer screening.
- *2009 Maine Cancer Surveillance Report* published.
- Ovarian cancer awareness campaign launched in Bangor.

Resources and Funding

- Outcomes for health curriculum completeness and quality now measured in some school districts, providing some baselines for future progress.
- Consortium funded hospitals for *No Sun for Baby* program, *Sun Blocks Childcare Sun Safety* program, and Parks and Recreation Departments for work in sun safety.
- Continued funding to Healthy Maine Partnerships (HMPs) for colorectal cancer public education and awareness.
- Maintained funding for screening services for women in the Maine Breast and Cervical Health Program and community-based programs.
- American Society of Clinical Oncology grant funded.
- The U.S. Centers for Disease Control and Prevention awarded a five-year grant to implement the Maine Colorectal Cancer Control Program.



Partnerships

- HMP Minimum Common Program Objectives addressed several plan strategies.
- Tobacco-free recreation sites and areas established as a strategy choice in the Minimum Common Program objectives for Public Health Districts and HMPs.
- HMPs working with physical activity and nutrition strategies and colorectal cancer awareness initiatives.
- Worked with Office of Minority Health (OMH) on disparities.
- Collaborated with the Maine Hospital Association and OMH to improve valid recording of race and ethnicity on hospital admission records.
- Worked with Maine School Nurse Association on sun safety issues.
- Melanoma Foundation of New England conducted *2009 Teens & Tanning Forum* at Fenway Park with Maine students and assisted in the distribution of *Sun Blocks* funding.
- Worked with Maine's Native American tribes to develop a chronic disease plan for Maine's five tribal communities.

Education and Advocacy

- Co-sponsored a Certified Tumor Registrar Symposium for Cancer Registrars of Maine.
- Developed and released new radon outreach and educational materials, including provision of materials to over 100 individuals who educate others.
- Advocated for the inclusion of Quality Improvement Program (QIP) palliative care indicators within healthcare institutions and agencies.
- Collaborated to enhance restrictions and regulations on tanning for minors.
- Created and distributed a sun safety packet for Maine Parks and Recreation Departments, including distribution of 120 packets at departments' annual conference.
- Sponsored Maine Hospice Education Day.
- Presented national study findings to Maine audiences on epithelial ovarian malignancies and melanoma study.
- Updated breast cancer study with focus on reconstruction.

It is important to note that Consortium-sponsored or initiated activities are not the only cancer control and prevention activities making a difference in Maine. Consortium members and partners also work hard within their organizations to achieve the statewide goals of the *Maine Cancer Plan*. For example, the Center for Tobacco Independence continues to educate healthcare providers about smoking cessation, and provides cessation services to the public, with the support of Maine's Tobacco Settlement funds. The Cancer Community Center in South Portland provides valuable social and emotional support for those touched by cancer. The Maine Breast Cancer Coalition has developed a statewide network of people to respond quickly to legislative alerts pertaining to important breast cancer-related national and state legislation. These are just a few of the many ways people in Maine are working on this multi-faceted health problem.



The Maine Comprehensive Cancer Control Plan

Since 1999, members of Maine’s Cancer Consortium have worked together every five years to create a comprehensive cancer control plan for Maine. The *Maine Comprehensive Cancer Control Plan (Maine Cancer Plan)* is the roadmap used to guide the state’s collaborative approach to reaching the goal of promoting and preserving the health and quality of life of the people and communities of Maine by minimizing the impact of cancer. The Consortium’s success depends on having a strategic, effective, realistic plan that reflects the priorities defined by dedicated stakeholders and partners. The *Maine Cancer Plan* is a collaborative document, and one meant to be shared with all those interested in helping reduce the burden of cancer in Maine.

Defining priorities for cancer in Maine is not easy. There are many cancers, and many ways to work on reducing the burden of the disease. For each revision of the *Maine Cancer Plan*, the Consortium works to define objectives and propose activities that meet at the intersection of three key factors: what is feasible, what is supported by research, and what will have the greatest impact on the most people in Maine. Through an extensive planning process, Consortium members and partners work hard to understand where these factors intersect, and ultimately identify priorities that will make the greatest impact on cancer in Maine.

The Maine Comprehensive Cancer Control Plan: 2011 – 2015 comprises four sections:

Burden of Cancer in Maine describes how cancer affects Maine, citing data for burdens we can quantify, such as how many people become sick or die from cancer. It also acknowledges the burdens we cannot quantify; including the ways cancer challenges individuals, families, and communities.

The next section, **Overarching Issues Affecting Cancer in Maine**, looks at issues that are common to all cancers and all aspects of the cancer continuum. These issues are (1) Public Policy, Legislation, and Funding; (2) Disparities; and (3) Data and Surveillance. Priorities and issues included in this section are interwoven and reflected throughout all sections of the plan.

Affecting the Cancer Continuum examines ways to make an impact at different parts of the cancer continuum, including (1) Primary Prevention; (2) Early Detection; (3) Treatment; (4) Rehabilitation and Survivorship; and (5) Palliation and End-of-Life Care.

The final section, **Working Together to Change Cancer in Maine**, looks at the administration of the *Maine Cancer Plan* itself, covering areas of (1) Implementation; (2) Communications; and (3) Evaluation.



BURDEN OF CANCER IN MAINE



BURDEN OF CANCER IN MAINE

To make the biggest impact on cancer in Maine, the magnitude of the problem must first be understood. This includes information such as which cancers are most prevalent, which cancers are responsible for the most cancer deaths, and how much cancer costs in medical expenses, opportunity costs for lost productivity, and lives lost. The Maine Cancer Registry collects data that provides these answers and sets a foundation for planning effective work in cancer in Maine.

The Maine Cancer Registry (MCR) is a statewide, population-based cancer surveillance system in existence since 1983. MCR collects information about newly diagnosed and treated cancers (with the exception of basal and squamous cell carcinomas, which are not reportable) among Maine residents. This information is used to monitor and evaluate cancer incidence patterns in Maine, as well as to better understand cancer; identify areas in need of public health interventions; assist researchers; and improve cancer prevention, treatment, and control.

The data presented in this plan is from 2007 (incidence) and 2006 (mortality), the last years for which complete data is available.

Understanding Burden

There are different ways to describe the burden of cancer. This section looks at both the disease burden (who gets sick, how many get sick, and how many die) as well as economic burden (medical costs to treat the disease and losses due to the lost productivity of those who are diagnosed with cancer).

Cancer rates can be described in various ways, all of which have their own purposes. “Counts” tell how many people are diagnosed with cancer, and how many die from the disease each year. Counts help in planning for the resources needed to detect cancer, treat it, and support cancer survivors.

“Crude rates” reveal how many people are diagnosed with cancer, and how many people die from it, per unit of population (usually 100,000) per year. Crude rates help in estimating how big the cancer burden is, based on population size.

“Age-adjusted rates” give an accurate picture of the problem and a means of comparing Maine to populations across the world. These rates take into consideration that older people are more likely to be affected by cancer; therefore, a state such as Maine, with an older and aging population, tends to show a much higher cancer rate than other states where the average age is lower. Age-adjusted cancer rates eliminate any bias due to age and help us understand the degree of Maine's cancer burden compared with other states, and the nation, in an “apples-to-apples” comparison. These rates are also described per unit of population (usually 100,000) per year.



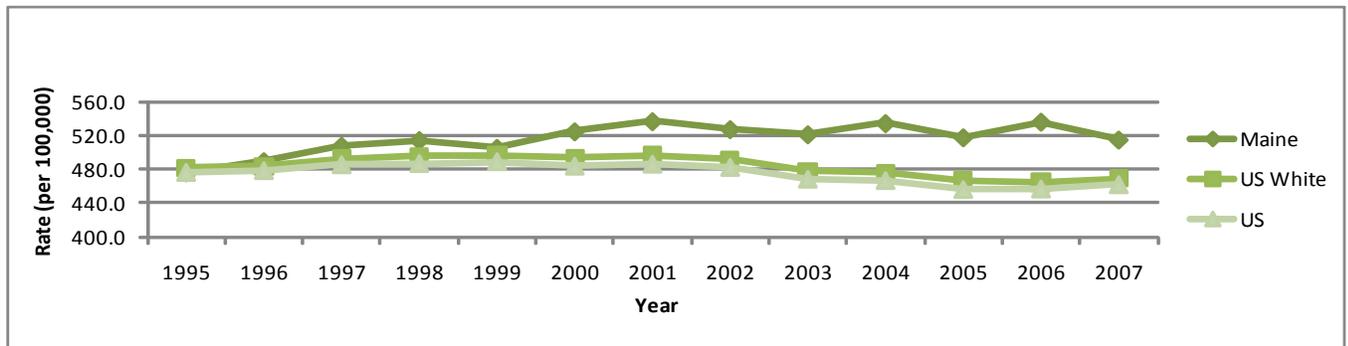
Cancer Incidenceⁱⁱⁱ

Approximately 8,200 Maine residents were diagnosed with some kind of cancer in 2007. The age-adjusted cancer incidence rate in 2007 was 515 cases per 100,000 Mainers – the highest cancer incidence rate in the nation. The incidence rate for the U.S. as a whole in 2007 was 461 cases per 100,000.

Maine's incidence rate is troubling because it does not follow the national trend of declining incidence rates, as Figure 1 shows. Age-adjusted cancer incidence rates in the U.S. have been declining since 1999, but Maine's have remained virtually unchanged over the same time period. The reason rates have increased is unclear, but may be a reflection of improved screening rates and technology.

The most frequently diagnosed cancers continue to be lung and bronchus cancers, prostate cancer, breast cancer, and colon and rectum cancers. These diagnoses made up over half of all new cancer diagnoses in Maine in 2007.

Figure 1. Age-Adjusted Rates of Cancer Incidence for Maine, U.S., and U.S. Whites, 1995-2007



Data source: Maine Cancer Registry and the National Surveillance, Epidemiology, and End Results Program.

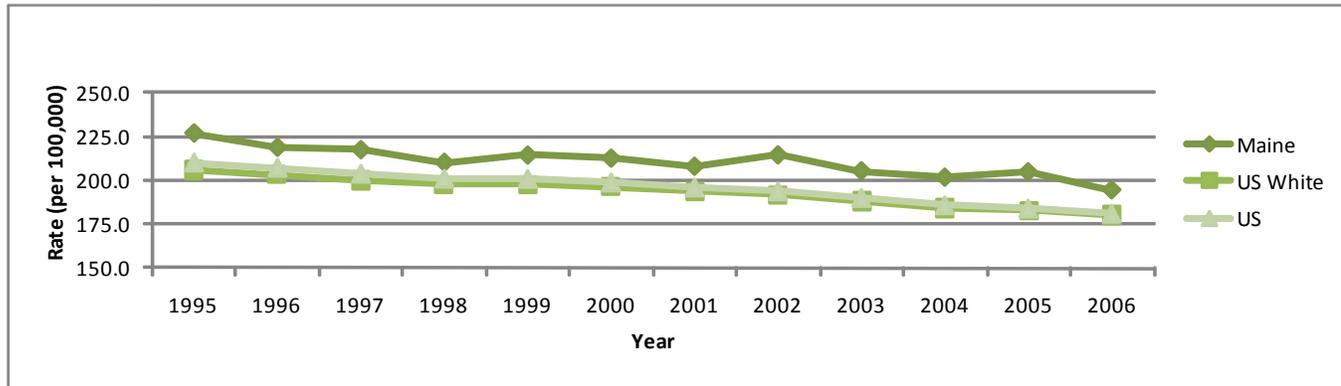
Cancer Mortality^{iv}

About 3,100 Mainers died from cancer in 2006. The good news is that the age-adjusted death rates for cancer have been declining in Maine, as they have for the U.S. as a nation. Unfortunately, though, the age-adjusted death rates in Maine have still been consistently higher than national rates. In 2006, Maine's age-adjusted cancer death rate was 194 per 100,000. The national cancer death rate was 181 per 100,000.

By far, the cancer with the highest age-adjusted mortality rate in 2006 for both men and women was lung cancer (50 per 100,000 for women and 78 per 100,000 for men). For women, breast cancer is next (21 per 100,000), followed by colorectal cancer (14 per 100,000) and female genital cancers, including cervical, uterine, and ovarian cancers (12 per 100,000). After lung cancer, the cancers responsible for the highest cancer death rates in men are prostate cancer (24 per 100,000) and colorectal cancer (21 per 100,000). Recent age-adjusted rates are shown in Figure 2.



Figure 2. Age-Adjusted Rates of Cancer Mortality for Maine, U.S., and U.S. Whites, 1995-2006



Data source: Maine Cancer Registry and the National Surveillance, Epidemiology, and End Results Program.

Maine's children are affected by cancer, too. Based on unpublished data from 1995 to 2004 made available by MCR (2009), there are approximately 62 new cases of childhood cancers each year in the state's under-20 population, with an average of 12 cancer deaths expected annually. The annual incidence rate of childhood cancers in Maine from 2002 to 2006 was 19 per 100,000, which is higher than the national rate of 17 per 100,000. More than half of the childhood cancers in Maine can be attributed to leukemia, lymphoma, and cancers of the central nervous system.

Cost

It is difficult to place a value on human life and wellness, and anyone touched by cancer knows of the high and complex costs associated with the disease. When defining the economic burden of cancer, the goal is not to place a dollar value on human life, but to be able to express losses in a way that makes an impact on those who set priorities and create policies.

The economic burden of cancer looks primarily at two things: (1) the cost of treating the disease and (2) the cost of losing a productive member of society to illness or death.

The National Institutes of Health (NIH) estimated the costs for treating cancer nationwide in 2010 at \$102.8 billion.^v This figure includes all direct health expenditures related to treating cancer, and represents about 5% of all healthcare expenditures in the U.S.^{vi} Maine bears its proportional share of this economic burden. Many of these expenses are paid by private insurance plans, the companies that sponsor private plans, and public insurance plans.

Individual cancer patients are increasingly responsible for bearing the burden of some of these costs. Some people have no insurance at all, but even for those with insurance, out-of-pocket expenses are increasing. This is a true burden and a significant barrier to accessing cancer care. The American Cancer Society demonstrates the relationship between health insurance and health outcomes in *Cancer Facts and Figures 2008*. People with inadequate health insurance simply have lower survival rates than those who have adequate insurance coverage.

In addition to direct costs, NIH estimates the indirect costs of cancer. According to 2010 estimates, the costs in lost productivity due to people being sick with cancer total \$20.9 billion.^{vii} This number takes into consideration how much work time was lost due to illness, and the financial impact of missed work. It is also possible to estimate how much productivity was lost to premature cancer death, and NIH estimates this cost at \$140.1 billion in 2010.^{viii} These indirect costs, combined with the aforementioned direct expense of cancer, bring the estimated total financial burden of this disease in 2010 to \$263.8 billion.^{ix}

There are additional costs associated with childhood cancers. Derived cost per childhood cancer case includes the cost of care for the initial cancer as well as additional costs related to the increased probability of a secondary cancer later in life. These estimates also include both lost parental wages and potential lifetime earnings of the child. The total cost per case is estimated to be \$840,482 (in 2008 dollars).^x

No matter how it is defined, the burden of cancer on Maine's people and communities is great, and a burden that Maine can no longer afford to bear. It is the intent of the *Maine Cancer Plan* to mobilize and synthesize efforts aimed at reducing the impact of this disease in Maine. This plan speaks to healthcare providers, community organizations, advocacy efforts, state and federal programs, policy makers, hospitals, cancer survivors, families, and communities, and was written with the hope that anyone who wants to make a difference in cancer in Maine will see themselves in this document. Through the synergistic approach of the Consortium and key stakeholders invested in the continued implementation of the plan, cancer will be forever changed in Maine.





OVERARCHING ISSUES AFFECTING
CANCER IN MAINE



OVERARCHING ISSUES AFFECTING CANCER IN MAINE

Public Policy, Legislation, and Funding

Introduction

It is well known that cancer prevention and control work is most effective with the added support of Maine's people and their lawmakers. Funding and laws that provide the resources to do this work greatly increase the chances of reducing the cancer burden.

Policy and legislation are powerful components of health intervention. The power of policy has become ever clearer through initiatives like clean indoor air (smoke-free) laws. Maine's legislature enacted several important pieces of legislation from 2006 to 2010, and during the next five years the Consortium will continue to support these legislative initiatives, as well as new and emerging legislation, as part of the statewide cancer control effort. Below is a summary of these pieces of legislation; more detail is included in Appendix C.

1. An Act Relating to Insurance Coverage for Colorectal Cancer Early Detection.

This law, effective June 30, 2008, requires all health insurance policies to cover colorectal cancer screenings recommended by a healthcare provider for people over the age of 50. It also requires policies to cover screenings for those younger than 50 if they are at a high risk for colorectal cancer. This law applies to all policies issued or renewed on or after January 1, 2009.

2. An Act to Protect Children in Vehicles from Secondhand Smoke. This law, effective September 1, 2008, makes it illegal for a person to smoke in a vehicle if a child under the age of 16 is present.

3. An Act to Protect Beaches in Maine's State Parks. This law, effective May 1, 2009, prohibits the smoking of tobacco or other substances in, on, or within 20 feet of a beach, playground, snack bar, group picnic shelter, business facility, enclosed area, public place, or rest room in a state park or state historic site.

4. A Resolution To Further Regulate the Use of Tanning Booths by Minors. This resolution, signed June 10, 2009, clarifies and amends the rules for the use of tanning facilities by minors. The resolution states that tanning devices must not be made available to minors under age 14. For minors ages 14 and older, the tanning facility must confirm the identities of the minor and the minor's parent or guardian, and be present when the parent or guardian signs written consent. The written consent is only valid for a year, at which time the parent must give it again. Parents/guardians can remove their consent at any time. Even with written consent, minors ages 14 and 15 must be with a parent or guardian when they use tanning facilities.



In June, 2009, Governor John Baldacci signed the following three bills (5. through 7.) addressing obesity in Maine.

5. An Act to Increase Access to Nutrition Information requires chain restaurants operating in Maine to post caloric content information for food and drinks on either the menu or a menu board.

6. An Act to Track the Prevalence of Childhood Obesity in Maine encourages schools to collect body mass index data for students to help the schools and the state track obesity rates as well as the success or failure of anti-obesity programs.

7. An Act to Implement the Recommendations of the PE4ME Planning and Oversight Team assesses physical education capacities at schools and encourages more schools to expand their physical education offerings.

8. An Act To Reduce Lung Cancer Rates in Maine. This law, effective September 12, 2009, requires a landlord or anyone renting out a residential building to test the air of the building for radon. Those affected by the law must start testing in 2012 and repeat the test every 10 years after that. If the radon levels are unsafe, the landlord must notify the tenants and correct the problem.

9. An Act To Prohibit Smoking in Outdoor Eating Areas. This law, effective September 12, 2009, takes the clean indoor air laws a step further, to make it illegal to smoke in all enclosed areas of public places, even if they are outdoors. This includes outdoor eating areas and all restrooms made available to the public. This law also makes it illegal to smoke in the outdoor areas of a childcare facility where children may be present.

10. Revision to The Maine Workers Compensation Act, Section §328B: Cancer Suffered by a Firefighter. As of September 12, 2009, there is a rebuttable presumption that the firefighter (a municipal department or volunteer fire association whose duties include the extinguishment of fires) contracted cancer (kidney, prostate, breast, non-Hodgkin lymphoma, testicular, colon, brain, bladder, leukemia, or multiple myeloma) in the course of employment as a firefighter and as a result of that employment. This new language in the Workers Compensation statutes shifts the burden of proof from the firefighter (having to prove the cancer is related to firefighting activities) to the municipal employer (now having to prove that the cancer is or is not related to the firefighter's employment).

These examples show the importance of state-level support in changing the way Maine works to reduce and eliminate cancer risks. This section, new to the *Maine Cancer Plan*, recognizes the power and critical importance of policy in reducing the cancer burden in Maine.

Relevant progress made on goals and objectives in this section will be included in the annual *Maine Comprehensive Cancer Control Initiative Evaluation Report*.



Goals and Objectives: Public Policy, Legislation, and Funding

Goal 1: Pursue sustainable means of funding and legislative support for all aspects of the Maine Comprehensive Cancer Control Plan.

Objective 1.1: Fulfill the requirements of current funders to maintain existing sources of funds through 2015.

Objective 1.2: Measure, pursue, and secure new funding resources through building partnerships, engaging private organizations, and pursuing new federal opportunities as they arise through 2015.

Objective 1.3: Measure current and emerging financial resources and partnerships to address gaps in the *Maine Comprehensive Cancer Control Plan: 2011–2015* based on annual review and recommendations from the Consortium Board of Directors through 2015.

Objective 1.4: Review annually and develop funding strategy for the *Maine Comprehensive Cancer Control Plan: 2011-2015*.

Goal 2: Promote current and emerging policies and legislation that will help reduce the cancer burden in Maine.

Objective 2.1: Initiate and support a policy/legislative sub-committee to coordinate and support legislative efforts surrounding cancer control in Maine by 2011.

Objective 2.2: Increase annually the number of eligible Consortium partners who participate in the Cancer Legislative Day at the Capitol through 2015.

Objective 2.3: Increase annually the number of policy-making activities in which Consortium members engage through 2015.

Disparities

Introduction

Cancer affects everyone in Maine, but it does not affect all Mainers equally. The National Cancer Institute defines “cancer disparities” as the differences in the incidence, prevalence, mortality, and burden of cancer among specific population groups. These population groups are defined by many characteristics such as gender, age, ethnicity, education, income, social class, disability, geographic location, and sexual orientation.

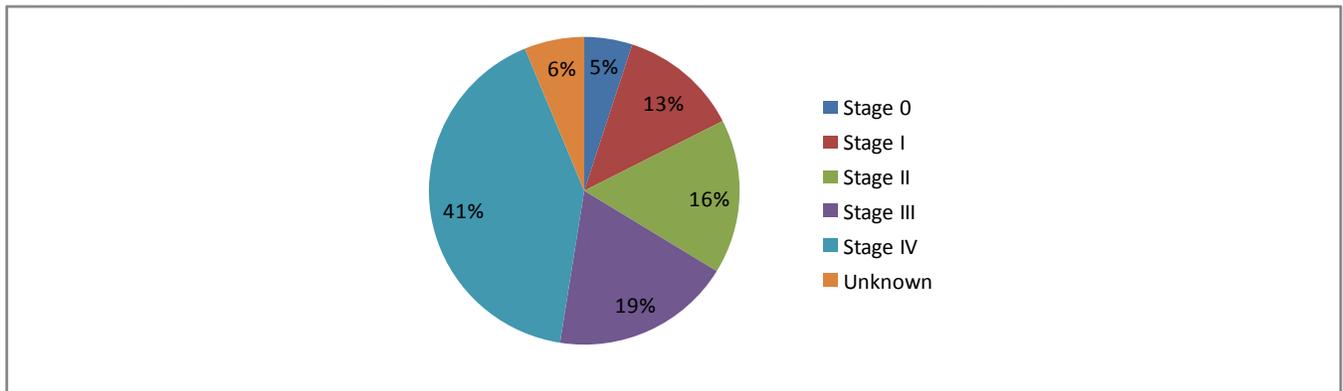
Overall, Maine’s population is small (1.3 million in 2009), which makes it difficult to collect data showing whether segments of Maine’s population experience disparities in cancer health outcomes, and if so, how great the disparities are. Existing data is so sparse that it cannot be reported without inadvertently identifying individuals, thereby compromising privacy. However,



people in Maine can infer from national-level data collected in similar communities, and take action to address these emerging gaps among populations statewide.

The reasons for health disparities are complex, but some of the clearest factors are (1) financial barriers (lack of adequate healthcare coverage); (2) geography (distance from timely, quality care); (3) low socioeconomic status (reflecting income as well as education and occupation); and (4) cultural barriers (differences in language and cultural practices between populations and care providers). National research suggests that people who experience these barriers are more likely to be diagnosed with late-stage disease that might have been treated more effectively or cured if diagnosed earlier. Figure 3 depicts this disparity among those without health insurance in Maine.

Figure 3. Stage of Cancer Diagnosis (All Sites) Among Uninsured Mainers (2007)



Data source: National Cancer Database 2010, All Types, ACoS Hospitals in State of Maine, Data from 13 Hospitals.

While cancer health disparities may be apparent in any sub-segment of Maine’s population, Maine’s tribal communities, as well as the growing refugee population, may experience these challenges to a greater degree, and should be noted. Maine’s five tribal communities, including the Aroostook Band of Micmac Indians, the Houlton Band of Maliseet Indians, the Passamaquoddy at Indian Township, the Passamaquoddy at Pleasant Point, and the Penobscot Nation, may experience disparities in cancer care and cancer health outcomes as a result of the aforementioned factors. Other factors such as poor nutrition, tobacco use, and environmental exposure may also be elevated in these remote and rural communities, putting them at greater risk for developing certain cancers.

Maine also has a growing refugee population, primarily from the African countries of Sudan and Somalia, but also including Rwanda, Ethiopia, Iraq, Serbia, and Croatia. In addition to experiencing broader and general health disparities, these populations also have unique healthcare needs and cancer risks, many of which continue to go unaddressed.

More thorough assessment is needed among the tribes, as well as refugee populations, in Maine, in order to completely understand the barriers and challenges surrounding cancer, and how to reduce the burden in these communities. As a result of the implementation of this plan,

it is hoped that these details will be discovered, and that Maine can strengthen its approach to reducing the burden of cancer across all populations in the state.

Relevant progress made on goals and objectives in this section will be included in the annual *Maine Comprehensive Cancer Control Initiative Evaluation Report*.

Goals and Objectives: Disparities

Goal 3: Understand and assess cancer health disparities in Maine.

Objective 3.1: Support efforts to ensure that all hospitals, including American College of Surgeons (ACoS)-accredited hospitals, collect accurate data on populations that typically experience cancer disparities, including but not exclusively race/ethnicity, primary language, and language needs for the deaf and hard-of-hearing, through 2015.

Objective 3.2: Analyze existing and emerging cancer data to better ascertain disparities in age, gender, race, ethnicity, culture, sexuality, gender, physical or mental disability, geography, and socioeconomic status through 2015.

Goal 4: Increase access to care and quality of care for medically underserved populations in Maine.

Objective 4.1: Advocate for the creation of a collaborative plan to eliminate disparities in cancer care due to age, gender, race, ethnicity, culture, sexuality, gender, physical or mental disability, geography, and socioeconomic status through 2015.

Objective 4.2: Establish a statewide health disparities advisory group to coordinate the implementation of activities addressing cancer disparities in Maine by 2015.

Goal 5: Improve the ability of Maine's cancer care workforce to provide quality care for medically underserved populations.

Objective 5.1: Support the implementation of National Standards of Culturally and Linguistically Appropriate Services in Healthcare for healthcare providers, public health professionals, and biomedical researchers through 2015.

Objective 5.2: Promote and support Maine's medical institutions in their ongoing commitment to organizational cultural competence and recruitment and retention of underrepresented populations in healthcare, research, and the public health workforce through 2015.

Objective 5.3: Support recruitment and retention of cancer care providers to work in underserved areas, and with underserved populations, through 2015.

Data and Surveillance

Plans for reducing cancer burden in Maine depend greatly on having timely, high quality, and complete cancer data. Data can help people identify possible causes for cancer, where greater prevention efforts are needed, and which strategies are helping to reduce cancer mortality. As discussed in the “Disparities” section, high quality data also help identify which groups bear a disproportionate and disparate cancer burden in Maine.

Since 2004, the Maine Cancer Registry (MCR) has achieved and maintained the gold standard for cancer data timeliness, completeness, and quality from the North American Association of Central Cancer Registries. This marked the first time that Maine cancer data became acceptable to include in all national cancer databases.

Relevant progress made on goals and objectives in this section will be included in the annual *Maine Comprehensive Cancer Control Initiative Evaluation Report*.

Goals and Objectives: Data and Surveillance

Goal 6: Improve data collection and cancer surveillance in Maine.

Objective 6.1: Increase the number of advisory groups, Consortium partners, and other organizations that use state-specific data to develop strategic cancer goals and activities through 2015.

Objective 6.2: Utilize data from the Behavioral Risk Factor Surveillance System (BRFSS), Maine Youth Risk Behavior Survey (YRBS), and MCR to produce an updated five-year *Maine Cancer Surveillance Report* (last published Fall 2009) by 2015.

Objective 6.3: Support maintenance of MCR’s North American Association of Central Cancer Registries certification for data timeliness, completeness, and quality.





AFFECTING THE CANCER CONTINUUM



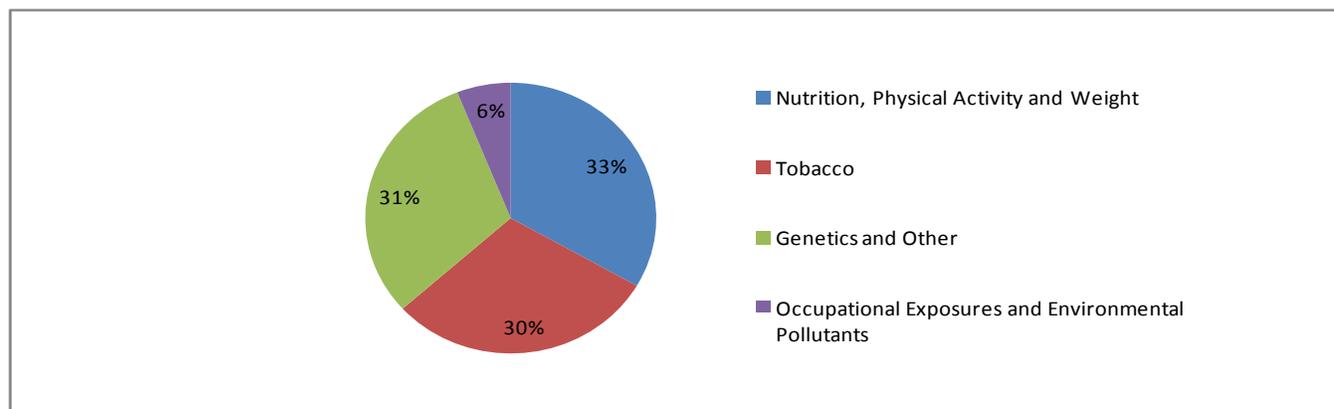
AFFECTING THE CANCER CONTINUUM

Primary Prevention

Introduction

Cancer is a complex set of diseases. Researchers are learning more every day about its causes; what is known now is that over half of all cancers may be preventable through lifestyle changes and screening. When individuals and communities engage in cancer prevention, they are taking steps to promote healthy lifestyles through behavior changes, policies, and their environments. Figure 4 shows how various risk factors contribute to different cancers.^{xi} Many of these cancer prevention strategies are effective in reducing the risk of other chronic diseases, as well.

Figure 4. Proportion of Cancers Attributable to Specific Risk Factors



Data source: American Cancer Society. *Cancer Facts & Figures 2010*.

The *Maine Cancer Plan* lists two major goals for reducing cancer burden through prevention. The first (“Reduce overall cancer risk due to selected modifiable risk factors”) focuses on helping people eliminate harmful lifestyle practices. The second (“Reduce the risk of cancer in Maine through the integration of healthy behaviors and preventive strategies into the lifestyles of all Mainers”) focuses on helping people adopt new healthy lifestyle practices that allow them to foster good health and handle environmental threats proactively.

The *Maine Cancer Plan* focuses on cancer prevention as an effective cancer control strategy, especially in the areas of tobacco, nutrition, physical activity, weight, sun safety, sexual health, and regular testing for known environmental carcinogens.

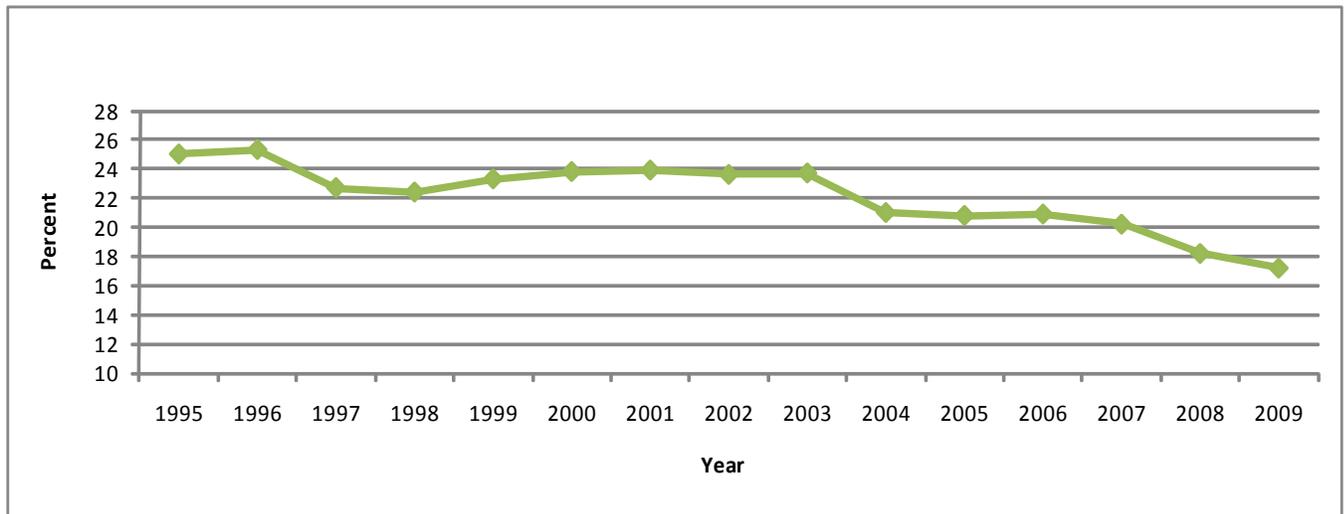
Tobacco and Alcohol Use

Maine has long been a national example of effective tobacco cessation and control programs. The Partnership For A Tobacco-Free Maine (PTM), the state tobacco prevention and control program, along with its many partners, continues to make strides in reducing tobacco use. Maine approaches the problem of tobacco use with major objectives to protect the public from secondhand smoke exposure, promote cessation, and prevent initiation, while addressing populations disparately affected by tobacco use.

Despite statewide efforts and progress in reducing smoking rates in several population groups, Maine’s leading cancer killer continues to be lung cancer, which is largely attributed to tobacco use.^{xii} Figure 5 shows the decline in smoking rates among Maine adults in recent years.

According to the U.S. Surgeon General, tobacco use also contributes to cancers of the oral cavity, larynx, pancreas, bladder, reproductive system, stomach, colon, prostate, blood, liver, brain, and kidney.

Figure 5. Maine Adults Who Are Current Smokers (1995-2009)



Data source: Behavioral Risk Factor Surveillance System.

The risk for mouth and throat cancers increases when alcohol and tobacco are used together. The American Cancer Society says that oral cancers are six times more common in alcohol users than in non-alcohol users. About 75% to 80% of all patients with oral cancer consume alcohol frequently. In addition, research continues to show that even moderate alcohol use increases a woman’s risk for estrogen-related breast cancer.^{xiii}

Though Maine is a leader in substance abuse prevention and control, there is still work to do, and this work continues to be a matter of life and death.

Obesity, Nutrition, and Physical Activity

Weight makes a difference in cancer prevention. A 2003 study from the *New England Journal of Medicine* showed that being overweight or obese* is associated with increased risk of developing certain cancers, and most likely, an increase in the risk of death from all cancers.^{xiv} It is estimated that 90,000 deaths in the U.S. due to cancer could be prevented each year if people maintained normal weight. This study showed that overweight and obesity were found to account for an estimated 14% to 20% of all cancer-related deaths.

* Overweight and obese are labels for ranges of weight that are greater than what is generally considered healthy for a given height. For adults, overweight and obesity ranges are determined by using weight and height to calculate a number called the body mass index. More information is available at www.mainepublichealth.gov.



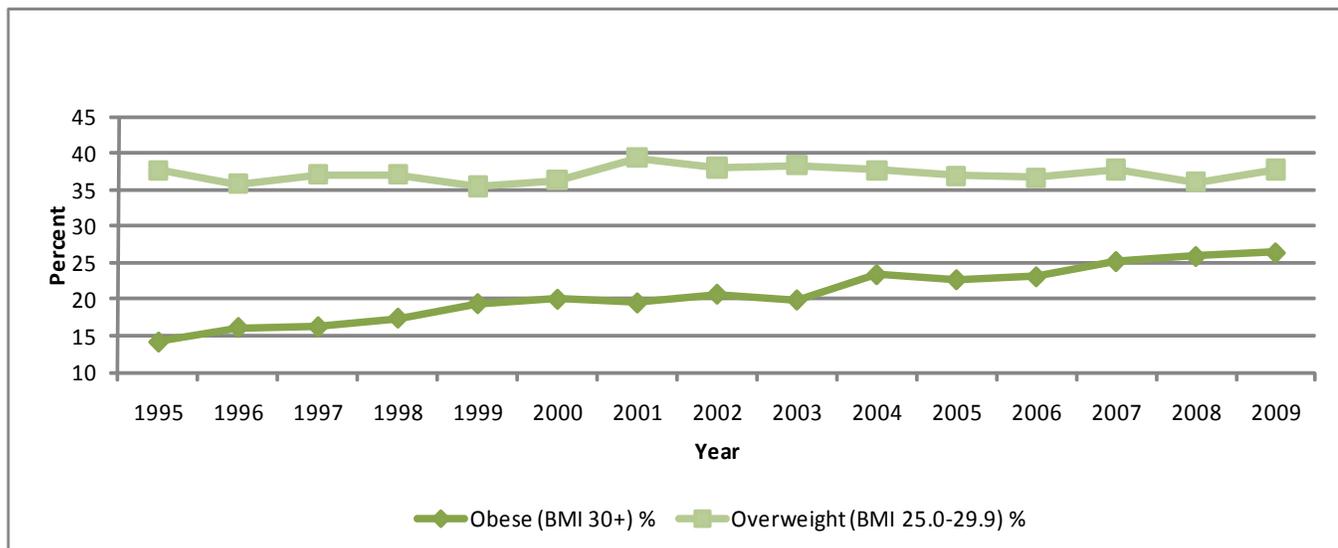
Approximately 64.1% of Maine adults are either overweight (37.7%) or obese (26.4%) based on the 2009 Behavioral Risk Factor Surveillance System (BRFSS) survey, which collects self-reported data. Figure 6 shows details. These rates are higher than they were in 2000, when 56% of Mainers were overweight or obese. People tend to underestimate their weight when they self-report, so the number is likely even higher.

The weight problem extends to Maine’s youth. The 2007 Maine Youth Risk Behavior Survey (YRBS) found that, according to respondents’ self-reported height and weight, 13.1% of high school students were defined as overweight, and an additional 12.8% of high school students were considered to be at risk for becoming overweight.

How did Maine’s adult and youth populations get to this point? Nutrition and physical activity data cast some light on this question. In 2009, only 28% of Maine adults reported eating five or more servings of fruits and vegetables a day, as shown in Figure 7. This is higher than the 1994 level of 21%, but it still represents a minority of the population. Fruit and vegetable consumption among Maine teens holds steady between 20% and 25%.^{xv}

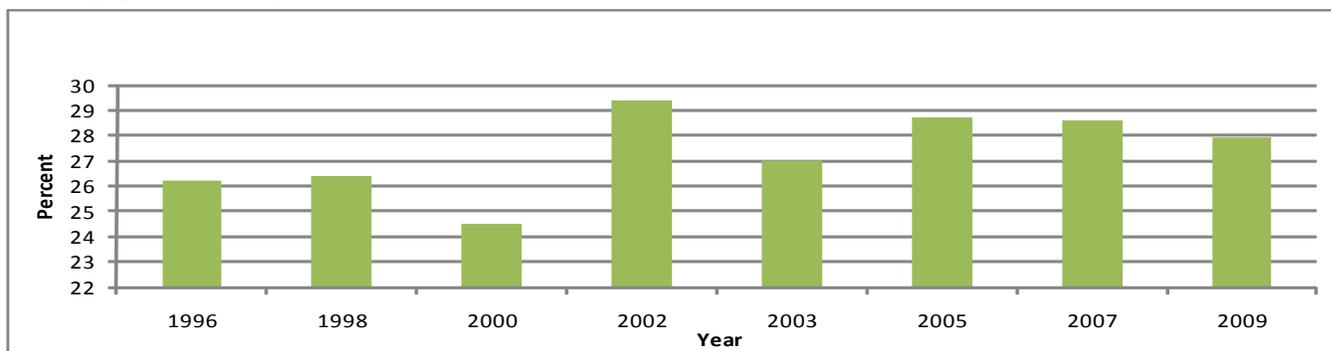
Physical activity practices among adults are also slow to change, increasing only about 1% every two years, but they are moving in a positive direction, as shown in Figure 8. Among high school students, however, physical activity declined between 2001 and 2007, with significantly fewer females than males engaging in physical activity. The 2007 YRBS found that only 6.7% of high school students attended daily physical education classes, the lowest rates in the U.S. Maine is working hard to impact and positively change these trends. In 2009, three pieces of legislation were passed to help Mainers better understand and address the problem of overweight and obesity. More information on this legislation is available in Appendix C.

Figure 6. Maine Adults Who Are Overweight or Obese (1995-2009)



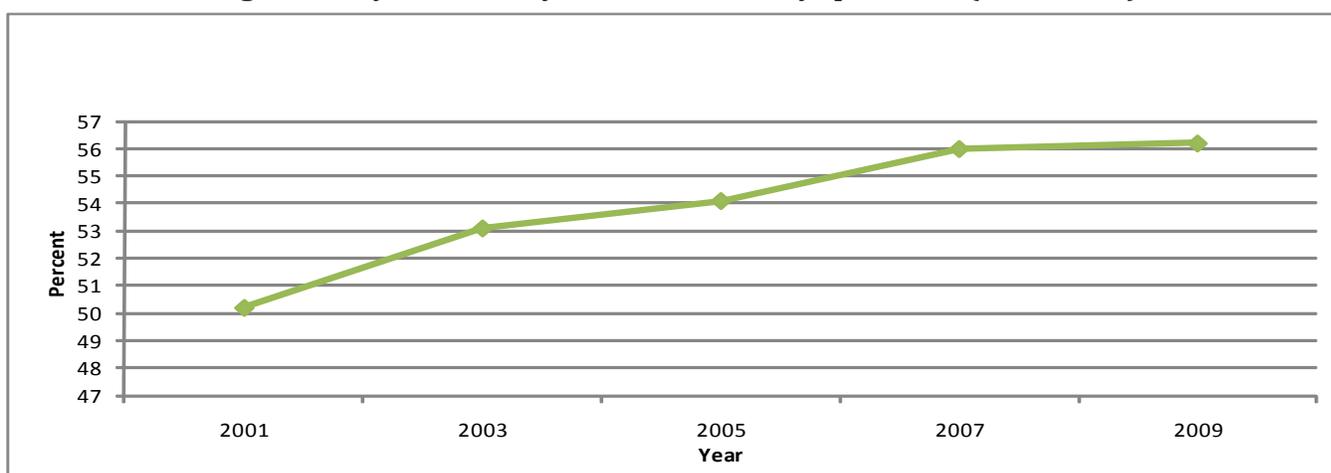
Data source: Behavioral Risk Factor Surveillance System.

Figure 7. Maine Adults Who Report Consuming Five or More Servings of Fruits and Vegetables Per Day (1996-2009)



Data source: Behavioral Risk Factor Surveillance System.

Figure 8. Adults with 30+ Minutes of Moderate Physical Activity Five or More Days per Week, or 20+ minutes of Vigorous Physical Activity Three or More Days per Week (2001-2009)



Data source: Behavioral Risk Factor Surveillance System.

Sexual Health

Certain sexually transmitted diseases (STDs), including human papillomavirus (HPV), hepatitis B (HBV), and human immunodeficiency virus (HIV), are associated with cancer. Certain types of HPV, specifically HPV-16 and HPV-18, are major causes of cervical cancer and may also play a role in cancers of the anus, vulva, vagina, and penis. HPV is also implicated in certain throat, oral, stomach, and colon cancers. Hepatitis viruses, particularly HBV, have been linked to liver cancers, and HIV has been linked to lymphoma, anal cancer, and Kaposi's sarcoma.

Risk factors for STDs include unprotected sexual contact and multiple partners. Standard prevention consists of safe sexual practices, such as limiting the number of partners and using condoms. Two new HPV vaccines make it possible to protect women from cervical cancer caused by this virus. In 2006, Gardasil® was approved by the FDA for use in girls and women ages 9 to 26, and in 2009 a second vaccine, Cervarix®, was approved for use in girls and women ages 10 to 25^{xvi}. The major challenge nationwide has been public acceptance of the vaccine. The national average of females ages 13-17 who receive the HPV vaccine is 37.2% for the single dose, and 17.9% for



the three-dose series.^{xvii} In 2009 the FDA also expanded its approval of Gardasil for use in boys and men; HPV can cause genital warts in males and has been linked to penis and anal cancer in men.^{xviii} There is hope that, as more people receive the vaccine, it will reduce the incidence of HPV infection and, indirectly, the incidence of cancer.

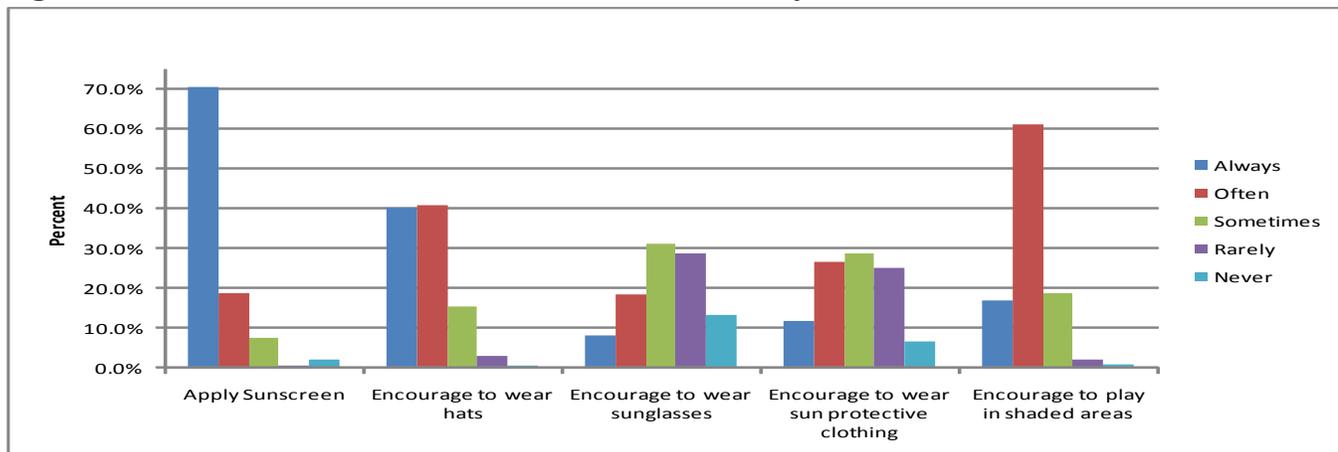
Discovering the link between infectious agents and certain cancers has provided an advantage in prevention; however, it comes with a challenging social stigma. Prevention, detection, and treatment surrounding these cancers, despite the cause in any one individual, must be approached with increased sensitivity until social norms evolve to support preventive vaccines.

Sun Safety

Most skin cancers are caused by skin damage due to unprotected exposure to ultraviolet (UV) radiation, primarily from the sun. Numerous studies have shown that sunburns during the first 20 years of life are linked to melanoma, the most fatal form of skin cancer. Primary sun safety practices, such as wearing protective clothing, hats, and sunglasses, as well as seeking shade during peak sun exposure times (especially in the early years of life) can prevent sunburn and reduce the risk of developing skin cancer later in life. Maine could significantly reduce the burden of skin cancer if people were to avoid early sunburns through the practice of these primary prevention behaviors, use sunscreen with a Sun Protection Factor (SPF) of 15 or greater (secondary prevention), and minimize the use of indoor tanning beds and booths, especially among minors.

Maine has made great progress in the last five years to promote sun safety, particularly in the high risk child and young adult populations. Legislation was passed in 2009 tightening restrictions on tanning for minors. In addition, several programs have been put into place to educate parents, childcare providers, and schools about sun safety, and give them tools to protect children from excessive sun exposure. Figure 9 shows baseline primary and secondary practices among childcare centers in Maine (2008).

Figure 9. Skin Protection Practices of State-Licensed, Facility-Based Childcare Centers in Maine



Data source: Statewide Survey of State-Licensed, Facility-based Childcare Centers (February 2008).

Environmental Health

The world today presents many different substances and chemicals, some of which may be carcinogenic. Researchers work to understand which ones are dangerous at which levels. Daily exposure to certain chemicals may increase the risk of certain cancers.

Radon Radon is a naturally occurring radioactive gas that enters homes primarily through soil, gas, and well water. Radon is the second leading cause of lung cancer after tobacco use. The greatest risk is for those exposed to radon who also use tobacco. Most of the cancers attributed to radon exposure occur among this group.

The National Research Council (NRC) estimated that one-third of lung cancer cases attributed to radon could be avoided if all homes had radon levels below the U.S. Environmental Protection Agency's (EPA's) action guidelines of 4 picocuries of radon per liter (pCi/L).^{xxix} Maine has taken this a step further, recommending that the level of radon stays below 2 pCi/L.

One survey estimated that 30% of Maine homes have indoor air radon levels exceeding 4 pCi/L, and a study of 650 schools across the state found 32% had at least one classroom with a radon concentration above 4 pCi/L.^{xxx} Radon from domestic well water may also constitute a significant indoor air radon problem in Maine. Results of a 1986 University of Maine survey of over 3,000 homes found that one in six homes with domestic wells had high levels of radon in the water that could result in high indoor air levels.^{xxxi} Of those homes found to have high radon concentration, roughly 33% were mitigated in 2000-2001. According to the Maine BRFS, about 28% of Maine homes were tested for radon gas in 2006.

Arsenic Arsenic is a naturally occurring element found in ground and surface water, and in many foods. Arsenic-containing pesticides were commonly used in many agricultural settings in Maine in the early to mid-1900s, but the greatest source of arsenic is the bedrock that people drill into to create deep wells. Current data indicates that approximately 10% of Maine homes with domestic wells have water with arsenic levels exceeding the national guidelines, primarily because of naturally occurring arsenic in Maine's bedrock.^{xxii}

Increasingly, data from New England and Maine indicates that a variety of common human activities (including petroleum releases, increases in soil pH above 8 at waste remediation sites, malfunctioning septic systems that leak leachate, and waste stove ash dumping) can increase the amount of organic carbon leached to groundwater that in turn releases arsenic from bedrock. Testing for arsenic in public water supplies is regulated by the federal Safe Water Drinking Act. But in Maine, approximately one-half of the population is served by private water supplies, and these homeowners are responsible for the cost and effort for testing the safety of their own household well water.



Why are high levels of arsenic a problem? The NRC has concluded that there is a causal relationship between taking in even small amounts of arsenic over time, and skin, bladder, and lung cancers. This conclusion, particularly with regard to bladder cancer, has been supported by further studies.^{xxiii}

Between 1998 and 2002, Maine had the highest bladder cancer mortality rate for men and the sixth highest for women in the country. In 2006, that number dropped to fourth for men but went up to second for women,^{xxiv} but there is still work to do. Maine men get sick with bladder cancer at a higher rate than the national average, and Maine has the highest bladder cancer incidence for women in the country. Arsenic in wells is a solvable problem, and testing wells for arsenic may be the key to fixing it.

Some of the partners invested in the *Maine Cancer Plan's* effort to protect Maine against environmental causes of cancer are the Maine Department of Environmental Protection, the Maine Board of Pesticides Control, the Maine Radiation Control Program, the Environmental and Occupational Health Program, the Toxics Use Reduction Program, and the Maine Air Toxins Program.

Goals and Objectives: Primary Prevention

Goal 7: Reduce overall cancer risk in Maine due to selected modifiable risk factors.

Objective 7.1.a: Reduce to 10% the proportion of Maine high school students who report smoking tobacco products in the past 30 days by 2015. (Baseline: 14.0%, MYRBS, 2007)

Objective 7.1.b: Reduce to 5% the proportion of Maine high school students who report smokeless tobacco use in the past 30 days by 2015. (Baseline: 6.2%, MYRBS, 2007)

Strategies:

1. Provide support to schools to implement evidence-based tobacco prevention education as part of a comprehensive K-12 school health education curriculum.
2. Implement policy and environmental changes in communities and at the state level to discourage youth access to and use of tobacco products.
3. Provide support to youth in leadership roles to advocate for policy and environmental changes that effectively discourage youth access to and use of tobacco products.

Objective 7.2: Decrease to 15% the proportion of Maine adults who are current smokers by 2015. (Baseline: 17.2%, BRFSS, 2009)

Strategies:

1. Implement policy and environmental changes in communities and at the state level to discourage use of tobacco products, including but not limited to, increasing the number of 100% smoke-free site environments.



2. Increase the number of post-secondary education institutions that have tobacco-free campus policies (Maine Tobacco-Free College Network standards).

Objective 7.3.a: Reduce to 11% the proportion of Maine high school students who are obese by 2015. (Baseline: 12.8%, MYRBS, 2007)

Objective 7.3.b: Reduce to 12% the proportion of Maine high school students who are overweight by 2015. (Baseline: 13.1%, MYRBS, 2007)

Strategies:

1. Collaborate to increase the number of Maine School Administrative Units (SAUs) that have enhanced school wellness policies.
2. Collaborate to increase the number of Maine SAUs that provide physical activity and healthy eating programs.
3. Collaborate to increase the number of Maine SAUs that promote and enable safe walking and biking to school.
4. Support food security organizations in promotion of nutrition and physical activity to clients.
5. Advocate for full implementation of the policy and environmental change recommendations of the Commission to Study Public Health.

Objective 7.4.a: Reduce to 25% the proportion of Maine adults who are obese by 2015. (Baseline: 26.4%, BRFSS, 2009)

Objective 7.4.b: Reduce to 35% the proportion of Maine adults who are overweight by 2015. (Baseline: 37.7%, BRFSS, 2009)

Strategies:

1. Support food security organizations in promotion of nutrition and physical activity to clients.
2. Collaborate with local communities, towns, and cities to increase the number of walkable and bikable paths and trails, and community parks/recreation areas for physical and family activity.
3. Advocate for full implementation of the policy and environmental change recommendations of the Commission to Study Public Health.

Objective 7.5: Reduce to 18% the proportion of Maine high school students who report binge drinking (five or more drinks on a single occasion) within past 30 days by 2015. (Baseline: 23.3%, MYRBS, 2007)

Strategies:

1. Provide support to schools to implement evidence-based substance abuse prevention education as part of a comprehensive K-12 school health education curriculum.



2. Support policy and environmental changes in communities and at the state level to discourage youth access to and use of alcohol.
3. Provide support to youth in leadership roles to advocate for policy and environmental changes that effectively discourage youth access to and use of alcohol.

Objective 7.6: Reduce to 6% the number of Maine adults who report heavy drinking (for men, more than two drinks per day; for women, more than one drink per day) by 2015. (Baseline: 6.9%, BRFSS, 2008)

Strategies:

1. Support environmental changes in communities and at the state level to discourage excessive use of alcohol.
2. Support education and prevention efforts in communities and at the state level to discourage excessive use of alcohol.
3. Support policy changes and enforcement in communities and at the state level to discourage excessive use of alcohol.
4. Collaborate to support reduction of binge drinking on Maine college campuses, including and especially among first-year students.

Objective 7.7: Increase by 100% the number of educational opportunities provided to middle and high school students addressing indoor tanning and skin cancer prevention by 2015. (Baseline: 11, Maine Cancer Consortium Skin Cancer group, 2009)

Strategies:

1. Collaborate with local, state, and regional partners to maximize resources to reach and educate high school students with skin cancer prevention and tanning messaging.
2. Establish behavioral baseline through the addition of an indoor tanning question to the MYRBS.
3. Provide annual communication to school health coordinators about programs and resources available to address skin cancer prevention at the middle and high school settings.
4. Work with partners to continue tanning messaging through outreach to Maine's secondary institutions.

Goal 8: Reduce the risk of cancer in Maine through the integration of healthy behaviors and preventive strategies into the lifestyles of all Mainers.

Objective 8.1: Increase to 50% the proportion of Maine youth who are physically active for 60+ minutes per day for five or more days of the past week by 2015. (Baseline: 43.1%, MYRBS, 2007)

Strategies:

1. Advocate for evidence-based physical education programs as part of comprehensive school health education curriculums.
2. Advocate for policy and environmental changes at the state, community, and school levels to increase access to physical education.
3. Provide support to youth in leadership roles to advocate for policy and environmental changes that increase opportunities for physical activity.

Objective 8.2: Increase to 60% the proportion of Maine adults who report engaging in 30+ minutes of moderate physical activity per day for five or more days per week or 20+ minutes of vigorous physical activity per day for three or more days per week by 2015. (Baseline: 56.2%, BRFSS, 2009)

Strategies:

1. Advocate for increasing the number of towns that address walkable and bikeable communities in their comprehensive plans.
2. Advocate for incorporation of physical activity objectives and initiatives into worksite wellness programs.

Objective 8.3: Increase to 23% the proportion of Maine high school students who consume five or more fruits and vegetables per day by 2015. (Baseline: 20.4%, MYRBS, 2007)

Strategies:

1. Advocate for evidence-based nutrition education as part of comprehensive school health education curriculums.
2. Advocate for policy and environmental changes at the state, community, and school levels to increase access to good nutrition.
3. Provide support to youth in leadership roles to advocate for policy and environmental changes that effectively increase proper nutrition.

Objective 8.4: Increase to 30% the proportion of Maine adults that consume five or more fruits and vegetables per day by 2015. (Baseline: 27.9%, BRFSS, 2009)

Strategies:

1. Advocate for more evidence-based nutrition education for adults in communities.
2. Advocate for policy and environmental changes at the state, community, and worksite levels to increase opportunities for good nutrition.

Objective 8.5.a: Increase to 35% the proportion of residences that test indoor air for radon. (Baseline: 25% radon indoor air, BRFSS, 2006)

Objective 8.5.b: Increase to 17% the proportion of private wells tested for radon in water. (Baseline: 12% radon water, Maine Radiation Control Program, unpublished data 1993-2008)



Objective 8.5.c: Increase to 50% the proportion of private wells tested for arsenic in water. (Baseline: 40% arsenic water, Maine Environmental and Occupational Health Programs, 2008)

Strategies:

1. Continue to participate in the State Indoor Radon Grant program through EPA.
2. Partner with Maine-based environmental organizations to educate Mainers about arsenic, radon, and the importance of testing well water and air for carcinogens.

Objective 8.6: Increase to 70% and 62% respectively the proportion of Maine youth who practice safe sexual behavior through abstinence or condom use by 2015. (Baselines: currently practice abstinence 66.6%; used condoms at last intercourse 58.9%; MYRBS, 2007)

Strategies:

1. Collaborate to provide support to school systems to implement age-appropriate comprehensive sexuality education as part of the K-12 comprehensive school health education curriculum.
2. Partner to provide support to community-based, youth-serving organizations to provide evidence-based teen pregnancy and STD/HIV prevention interventions to school-age youth.

Objective 8.7: Increase by 5% patient adherence to three-dose HPV vaccination administration among females ages 13-17 by 2015. (Baseline: Maine teens, 13-17 female, one-dose HPV 40.3% and three-dose HPV 21.4%, Maine Immunization Program, 2008)

Strategies:

1. Promote and support use of HPV vaccine through the Vaccine for Children Program.*
2. Promote the HPV vaccine through healthcare providers and clinics.
3. Support patient education efforts regarding HPV vaccine and cervical cancer prevention efforts.
4. Establish behavioral baseline through the addition of an HPV vaccine question to the BRFSS.

* The Vaccine for Children Program helps families of children age 18 and below who may lack access to vaccines by providing free vaccines to the doctors who serve them. The program is funded by U.S. Centers for Disease Control and Prevention through the National Immunization Program. Eligible patients may receive routine immunizations at little or no cost.



Objective 8.8: Increase to 16% the proportion of Maine youth who always or nearly always practice primary and secondary sun safety behaviors by 2015. (Baseline: youth sunscreen 14.1%, MYRBS, 2007)

Strategies:

1. Continue to introduce and emphasize sun safety messaging including secondary prevention strategies (sunscreen), and a stronger emphasis on primary methods of sun protection (hats, sun-protective clothing, sunglasses, and shade) throughout each stage of childhood.
2. Enhance sun safety and skin cancer prevention educational programs and opportunities for youth, including young children and their caretakers.
3. Support the enhancement of outdoor recreation and play areas in order to provide adequate shade for safe outdoor physical activity.
4. Establish baselines for primary sun safety behavior through the assessment and enhancement of questions on the MYRBS.

Objective 8.9: Increase by 2% the proportion of Maine adults who always or nearly always practice primary and secondary sun safety behaviors by 2015. (Baselines: adult shade 22.8%, BRFSS, 2006; adult hat 29.5%, BRFSS, 2007; adult sunscreen 37.5%, BRFSS, 2007)

Strategies:

1. Continue to emphasize sun safety messaging including secondary prevention strategies (sunscreen), and a stronger emphasis on primary methods of sun protection (hats, sun-protective clothing, sunglasses, and shade) in print, electronic, and interpersonal communications.
2. Enhance sun safety and skin cancer prevention educational programs and opportunities within the workplace.
3. Assess and revise measures of adult sun safety behavior included on the BRFSS.

Early Detection

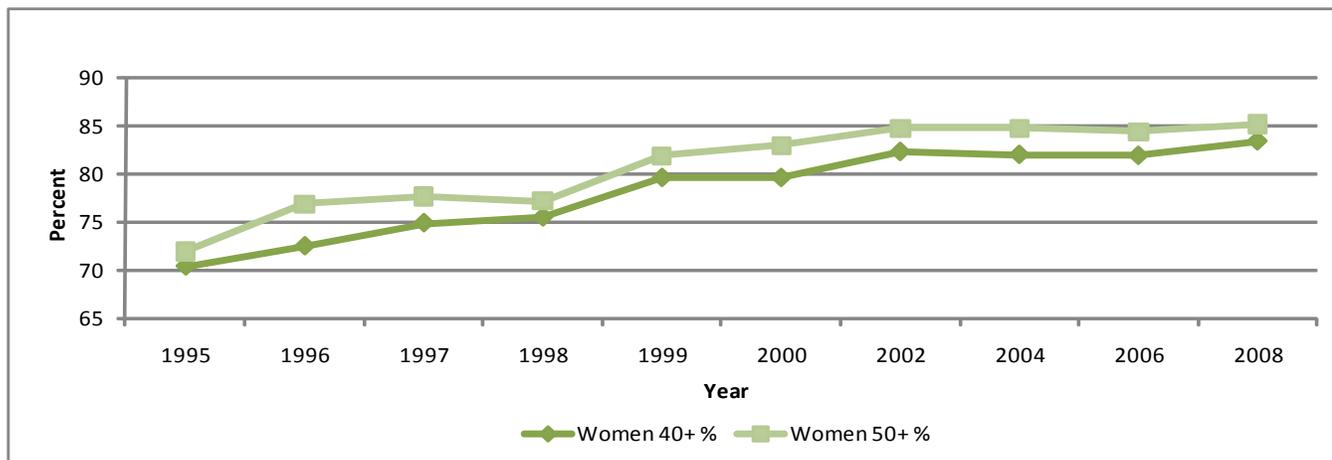
Introduction

For many cancers, catching the cancer early increases the chances that treatment will be successful, and fewer years of life will be lost. Research shows that screening for the early detection of some cancers, including breast (Figure 10), cervical (Figure 11), and colorectal cancer (Figure 12), makes a clear difference in health outcomes. For other cancers, like prostate cancer, the evidence is less certain.

“Early detection” means finding cancer or pre-cancerous changes in individuals before it can grow and spread into late-stage disease. A person may or may not have symptoms indicative of the disease in these early stages, which is why recommended screening tests are so important. Early detection saves billions of healthcare treatment dollars, and most importantly, lives.

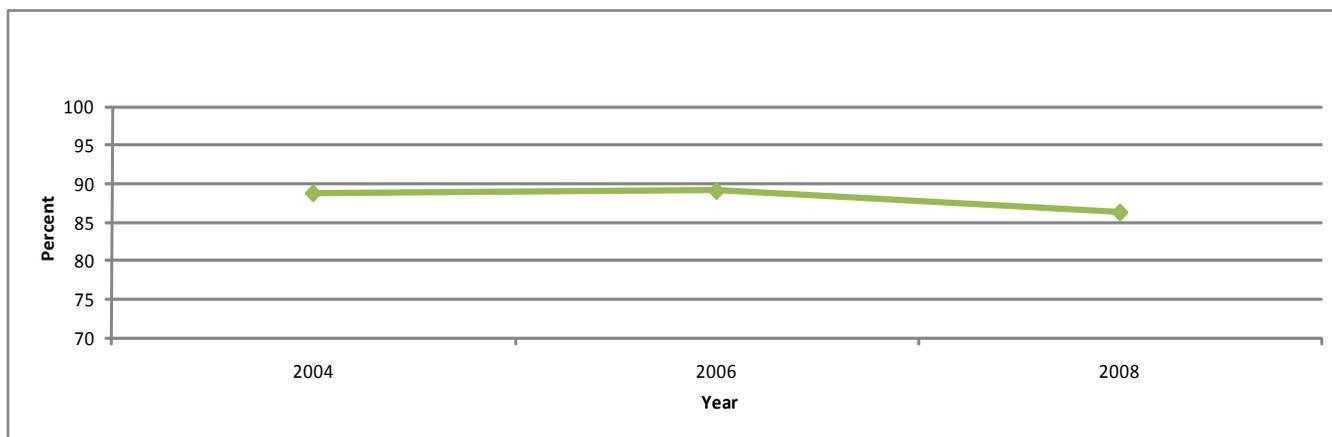


Figure 10. Maine Women Who Have Had a Mammogram Within the Past 2 Years (1995-2008)



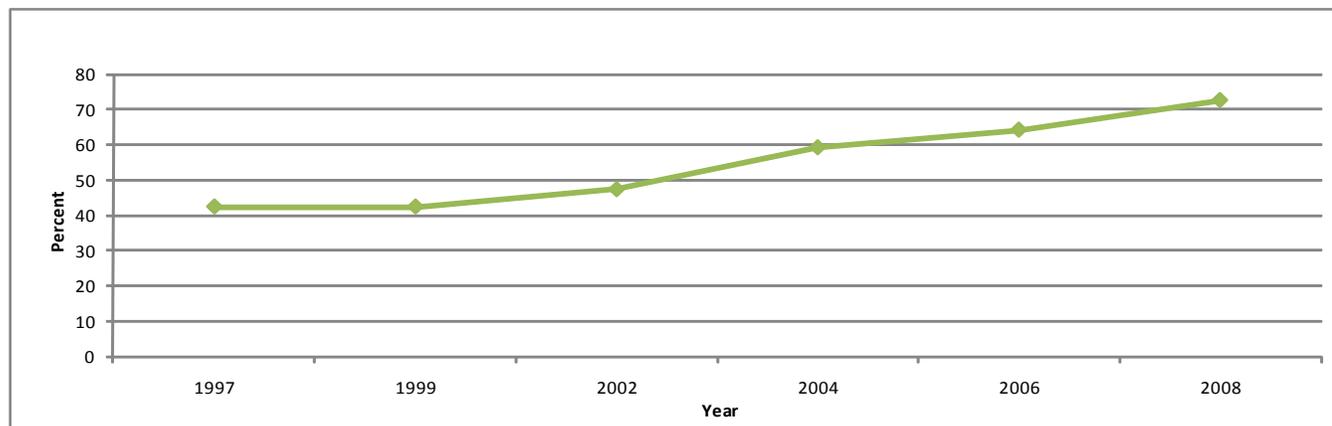
Data source: Behavioral Risk Factor Surveillance System.

Figure 11. Maine Women 18+ Who Have Had a Pap Test Within the Past 3 Years (2004-2008)



Data source: Behavioral Risk Factor Surveillance System.

Figure 12. Maine Adults 50+ Who Have Ever Had a Sigmoidoscopy or Colonoscopy (1997-2008)



Data source: Behavioral Risk Factor Surveillance System.

If early detection is to have an impact on reducing cancer burden, it must include six components: (1) public and patient education; (2) professional referral; (3) availability of services; (4) access to services; (5) quality assurance; and (6) surveillance/evaluation of early detection activities and outcomes. The objectives here reflect the priorities for building up Maine's capability in these areas.

Goals and Objectives: Early Detection

Goal 9: Promote, increase, optimize, and support the use of high quality cancer screening tests and follow-up services in Maine for all detectable cancers.*

Objective 9.1.a: Increase to 79.5% the proportion of Maine women ages 40-49 who have received a mammogram within the past two years by 2015. (Baseline: 78.6%, BRFSS, 2008)

Objective 9.1.b: Increase to 86% the proportion of Maine women ages 50 and older who have received a mammogram within the past two years by 2015. (Baseline 85.1%, BRFSS, 2008)†

Strategies:

1. Work with healthcare providers and community-based organizations to use the Maine Breast and Cervical Health Program (MBCHP)‡ in order to increase screening mammography rates.
2. Collaborate with partners statewide to raise population awareness of breast cancer and the importance of routine screenings.

Objective 9.2: Increase to 90% the proportion of Maine women with a uterine cervix, ages 18 and over, who have received a Pap test within the past three years by 2015. (Baseline: 86.3%, BRFSS, 2008)

Strategies:

1. Promote family planning services as part of an annual exam.
2. Work with healthcare providers and community-based organizations to utilize MBCHP services in order to increase cervical cancer screening rates.
3. Collaborate with partners statewide to raise population awareness of cervical cancer and the importance of routine screenings.

* See Appendix D for resources to obtain the most current clinical recommendations and guidelines for cancer screening.

† In previous Cancer Plans, the evaluation measure/indicator for early detection of breast cancer was “Mammogram and Clinical Breast Exam.” In this plan, “Mammogram” is used as the only measure/indicator in order to be consistent with the national measure collected by BRFSS.

‡ MBCHP is a comprehensive breast and cervical cancer early detection program funded by the National Breast and Cervical Cancer Early Detection Program, and supplemented by the State of Maine General Fund. The program coordinates the delivery of breast and cervical cancer screening and diagnostic services to low-income, uninsured, and underinsured women through a statewide network of primary care and referral healthcare providers. Eligibility criteria for enrollment in MBCHP include women: ages 50 and older, with limited openings for women ages 40-49, and symptomatic women ages 35-39; household income less than or equal to 250% of the Federal Poverty Level; and no health insurance, or insufficient coverage for breast and cervical cancer screening and diagnostic services. The Program collaborates with a variety of community-based organizations to promote the availability of the services through MBCHP, and works with a wide variety of partners to address services not covered by MBCHP. If women are diagnosed with breast and/or cervical cancer, MBCHP coordinates the enrollment of eligible women into the Maine Treatment Act to receive full MaineCare benefits including coverage of treatment services.



Objective 9.3: Increase to 80% the proportion of adults ages 50 and older who have ever received a colonoscopy or sigmoidoscopy by 2015. (Baseline: 72.6%, BRFSS, 2008)

Strategies:

1. Utilize available federal funding to establish the Maine Colorectal Cancer Control Program (MCRCCP).*
2. Encourage and enable the development of a systems approach for identifying eligible adults for colorectal cancer screening.
3. Work with community partners to increase awareness of the MCRCCP.
4. Collaborate with partners statewide to raise population awareness of colorectal cancer and the importance of screening.

Goal 10: Educate Mainers on the benefits of early detection, and provide support for community awareness activities.†

Objective 10.1: Provide at least 30 educational opportunities per year to inform Mainers about how to recognize the signs of melanoma (ABCDEs‡) by 2015. (Baseline: 0, Maine Cancer Consortium, 2010)

Strategies:

1. Promote early detection to healthcare providers by integrating learning opportunities into existing educational programs, conferences, and webinars.
2. Promote early detection to the general public through community events and statewide opportunities.
3. Build and strengthen new and existing partnerships to integrate sun safety programs into communities, including hospitals, childcare centers, schools, and parks and recreation facilities.

Objective 10.2: Provide two educational opportunities per year, presenting the most recent data on both the risks and benefits of prostate cancer screening, and promoting informed decision-making by patients, through 2015. (Baseline: 0, Maine Cancer Consortium, 2010)

Strategies:

1. Provide educational materials to urologists and primary care physicians to distribute to men ages 50 and over, and men ages 45-49 if considered to be at high risk for prostate cancer.

* MCRCCP is a screening and awareness program funded through the U.S. Centers for Disease Control and Prevention. The program focuses on helping all Mainers understand the importance of screening for colorectal cancer. MCRCCP provides no-cost screening services for Mainers who lack adequate health insurance, and connects Mainers with the resources they need to prevent, detect, and survive colorectal cancer. Eligibility criteria for enrollment in the program include men or women, ages 50 to 64, considered to be at average risk for colorectal cancer, living at or below 250% of the Federal Poverty Level, who are uninsured or have insufficient coverage for colon cancer screening and diagnostic services. The program works with a wide variety of partners to address services not covered by the program.

† Education/outreach for breast, cervical, and colorectal cancers is included in the objectives and strategies under Goal 9.

‡ The danger signs in pigmented skin lesions, commonly referred to as ABCDEs of skin cancer, include: asymmetry, border, color, diameter, and evolving.

2. Coordinate and implement regional and community educational opportunities addressing informed decision-making.

Objective 10.3: Collaborate to provide five public education opportunities per year, aimed at increasing general awareness of cancers that present with less discernible signs and symptoms, through 2015. (Baseline: 0, Maine Cancer Consortium, 2010)

Strategies:

1. Collaborate with health clinics and services throughout Maine to provide education about cancers with less discernible signs and symptoms.
2. Partner with established national and regional cancer advocacy and support groups to provide educational materials to communities throughout Maine.
3. Utilize national cancer awareness months to heighten public interest and attention to those cancers that present with less discernible signs and symptoms.

Objective 10.4: Increase to 75% the proportion of Maine's dental professionals who implement appropriate procedures to detect oral cancer within their professional practices by 2015. (Baseline: not yet established, survey of Maine dental practices, 2010)

Strategies:

1. Promote intra-oral examination for oral cancer as a standard part of an exam.
2. Encourage dental professionals to routinely assess tobacco and alcohol intake of their patients.
3. Advocate for the inclusion of oral cancer detection in dental curriculum and hygienist training programs.
4. Establish behavioral baseline through the addition of an intra-oral examination question to the BRFSS.

Goal 11: Reduce the incidence of hereditary cancers in Maine through coordinated genetic risk education, assessment, and counseling.

Objective 11.1: Adopt or create three educational resources for Maine healthcare providers related to the identification of risk for hereditary cancer susceptibility by 2015. (Baseline: 0, Maine Cancer Consortium, 2010)

Strategies:

1. Assess availability of educational resources related to the identification of risk for hereditary cancer susceptibility.
2. Assess learning preferences and utilization of technologies for learning by Maine healthcare providers.
3. Adapt available resources to the needs of Maine healthcare providers and develop new resources where gaps exist.
4. Deliver and evaluate cancer genetic risk educational resources.
5. Update, deliver, and evaluate educational resources on ongoing basis.



Objective 11.2: Develop or adopt and pilot test hereditary breast, colon, and ovarian cancer risk assessment tools for use by Maine healthcare professionals by 2015. (Baseline: NA, Maine Cancer Consortium, 2010)

Strategies:

1. Assess availability of existing risk assessment tools.
2. Assess clinical utility, usability, and validity of existing risk assessment tools.
3. Adapt available tools to the needs of Maine healthcare providers and develop new tools where gaps exist.
4. Pilot test risk assessment tools among a random sample of Maine healthcare providers, including primary care providers and relevant disease specialists.
5. Adapt tools based on pilot testing for broader use and further evaluation in Maine.

Objective 11.3: Advocate for all ACoS-accredited cancer centers to provide patients with access to cancer genetic risk assessment, counseling, and testing services by 2015. (Baseline: to be established, ACoS-accredited cancer centers, 2010)

Strategies:

1. Develop and conduct a survey of health organizations to assess where comprehensive cancer genetic risk assessment, testing, and counseling services are offered.
2. Project needs for cancer genetic risk assessment and counseling services through an analysis of existing hereditary cancer prevalence data in association with state morbidity data.
3. Develop and test strategies to fill gaps in statewide cancer genetic risk assessment, testing, and counseling services.
4. Seek funding to broaden availability of cancer genetic risk assessment, testing, and counseling services in Maine.
5. Assess insurance coverage for statewide cancer genetic risk assessment, testing, and counseling services.
6. Seek funding to cover comprehensive cancer genetic services for low-income, at-risk Mainers who lack adequate health insurance coverage.

Treatment

Introduction

In cancer treatment, the goal is to eliminate the cancer or control its progression, while maintaining the best quality of life possible for the person in treatment. Cancer treatment may be a lengthy process, during which the patient undergoes testing and evaluation before undertaking decision-making and therapy. In addition, many people with cancer receive a combination of

successive treatments, including conventional and alternative therapies. Though the specifics of every person's cancer are unique, there is one common denominator: Those diagnosed with cancer need geographic, financial, and cultural access to quality care.

Quality of Cancer Care Research in cancer treatment is constant and dynamic. Professional education and development is necessary in all cancer treatment centers and hospitals to keep up with the latest treatment methods, if the treatment they offer is to be considered high quality.

One indicator of high quality care is a facility's accreditation through the American College of Surgeons (ACoS) Commission on Cancer (CoC). Accredited hospitals ensure quality care through various cancer-related programs, including prevention, detection, pre-treatment evaluation, staging, optimal treatment, rehabilitation, surveillance for recurrent disease, support services, and end-of-life care. Currently, there are 36 hospitals in Maine that diagnose and treat cancer patients. Of those, 12 are ACoS-accredited cancer treatment centers.*

Another indicator of high quality care is the use of nationally recognized treatment guidelines, which standardize cancer treatment. Consistent and widespread use of national guidelines by healthcare professionals helps assure that all Mainers with cancer receive treatment equitably.

The cutting edge of cancer treatment in the last 40 years has often been found in clinical trials. Treatment trials test new cancer drugs, new combinations of therapies, and new methods of treatment. One objective defined in this section is to make clinical trials more accessible to appropriate candidates throughout Maine.

Access to Cancer Care and Treatment Information High quality care only works when the people who need care have access to it. The "Disparities" section described some of the barriers to obtaining quality cancer care. In Maine, as in most rural states, geographic access is of great concern. The Maine Cancer Registry (MCR) surveyed hospitals to learn more about what services are available in which regions of the state. According to the results, 38.4% of Mainers live less than 10 miles from an ACoS-accredited hospital, while 58.6% are within this range of an oncologist. Additionally, radiotherapy facilities are the least widely distributed of cancer treatment methods. The MCR survey indicated that in some circumstances, significant portions of Maine residents may be at risk for inadequate cancer care, based on travel distance to services.

Cancer treatment is costly, and many people face a financial barrier to care. In addition to the direct cost of medical care and wages lost due to illness, patients and their families bear the cost of out-of-pocket health insurance expenses. Even those with insurance often deal with high deductibles and co-payments, transportation costs, child and elder care, home care expenses, and the cost of special food and equipment.

* See Appendix E for a list of cancer-treating and ACoS-accredited hospitals in Maine.



Finances are not the only barrier to effective treatment. People with low socioeconomic status and those from ethnically disparate groups struggle to find the information they need to participate in informed, shared decision-making about treatment. Patients with low literacy levels and those who may not speak English face significant barriers to obtaining understandable information about cancer treatment options. Treatment works only if patients and their families are involved, and the opportunities for involvement are limited when people do not have the information they need, delivered in ways they can understand.

Every state, including Maine, has medically underserved areas as defined by the Health Resources and Services Administration. These areas include individual counties, groups of counties, groups of county or civil divisions, and groups of urban census tracts in which residents have a shortage of personal health services. Approximately 100,000 Mainers currently live in medically underserved areas and accordingly, face economic, cultural, or linguistic barriers to healthcare.^{xxv} The second goal in this section, “Increase access to quality cancer care,” is to work to reduce or eliminate some of these barriers. This is connected to the goals, objectives, and strategies in the “Disparities” section, which addresses ways to give medically underserved people access to quality care.

Goals and Objectives: Treatment

Goal 12: Elevate the quality of cancer care in Maine to meet or exceed national standards.

Objective 12.1: Conduct one to three State of Maine Cancer Outcomes studies per year through 2015 to monitor concordance with National Comprehensive Cancer Network clinical practice guidelines. (Baseline: 0, Maine Cancer Consortium, 2010)

Strategies:

1. Compare State of Maine Cancer Outcomes to national benchmarks.
2. Disseminate comparative data at one to three Maine or New England professional oncology meetings.
3. Outreach to healthcare professionals outside the oncology community.
4. Utilize Cancer Liaison Physician (CLP) positions to educate professional groups about cancer guidelines and State of Maine Cancer Outcomes studies.

Objective 12.2: Support at least three professional development opportunities per year, covering all regions of Maine, for oncology professionals through 2015. (Baseline: 0, Maine Cancer Consortium, 2010)

Strategies:

1. Establish and populate Treatment speakers bureau.
2. Disseminate results from State of Maine Cancer Outcomes studies at professional society and hospital-based oncology programs.
3. Utilize the Consortium website to disseminate State of Maine Cancer Outcomes studies results.



Goal 13: Increase access to quality cancer care.

Objective 13.1: Expand access to and awareness of reliable cancer treatment information by improving online resources and assuring at least one public presentation per year of the Maine Cancer Outcomes studies. (Baseline: 0, Maine Cancer Consortium, 2010)

Strategies:

1. Ask Maine CLPs to discuss the *Maine Cancer Plan* and results of State of Maine Cancer Outcomes studies each year with their local cancer steering committees.
2. Establish links from Consortium website to National Cancer Institute (NCI), American Cancer Society, and other reputable cancer information resources.
3. Utilize Treatment speakers bureau to disseminate results from State of Maine Cancer Outcomes studies.

Objective 13.2: Support the maintenance of ACoS CoC-accredited cancer programs in Maine with two to three educational activities per year through 2015. (Baseline: 0, Maine Cancer Consortium, 2010)

Strategies:

1. Employ the Consortium's Treatment group to provide a network between hospitals for sharing best-practice strategies and methods.
2. Support the State of Maine Chair of the CLPs by co-hosting an annual CLP meeting (to be held in conjunction with the Maine Chapter of the ACoS meeting) and include Consortium updates and State of Maine Cancer Outcomes studies.
3. Disseminate information regarding CoC standards and other national cancer quality initiatives.

Objective 13.3: Facilitate discussions using State of Maine Cancer Outcomes Studies that identify financial, geographic, and resource barriers to guideline-directed cancer care in Maine at one regional professional meeting per year through 2015. (Baseline: 0, Maine Cancer Consortium, 2010)

Strategies:

1. Partner with health systems to define strategies of regional care delivery.
2. Partner with the Consortium's Rehabilitation and Survivorship group to understand and address gaps in cancer care.

Objective 13.4: Increase clinical trial enrollment in Maine to 2% (national average) by 2015. (Baseline: unknown, source to be determined, 2010)

Strategies:

1. Establish State of Maine baseline for clinical trial accrual.
2. Increase awareness among physicians and patients of open clinical trials with a variety of communication strategies.
3. Explore opportunities to share and consolidate clinical research support and infrastructure.



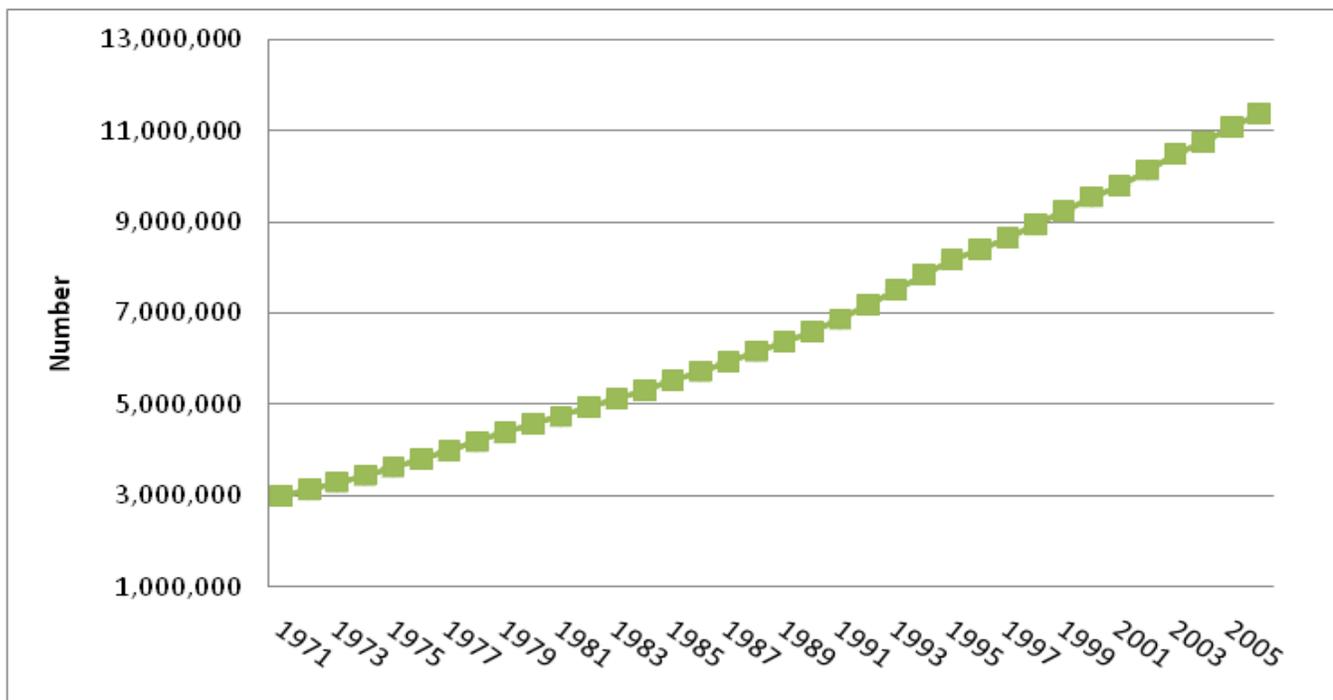
Rehabilitation and Survivorship

Introduction

Cancer survivorship begins the moment a person receives a cancer diagnosis and extends through their treatment journey, active surveillance, and throughout life. Survivorship includes people who are affected by one's cancer diagnosis, including family members, friends, and caregivers.

The five-year survival rate for all cancers has increased as a result of improvements in cancer screening and treatment, according to the American Cancer Society. Sixty-six percent of adults diagnosed with cancer are living five years after their diagnosis, and nearly 79% of those who had childhood cancer are alive after 10 years.^{xxvi} These statistics, shown in Figure 13, are “living proof” that cancer is no longer a death sentence.

Figure 13. Estimated Number of Cancer Survivors in the U.S. (1971-2006)



Data source: MJ Horner, LAG Ries, M Krapcho, N Neyman, R Aminou, N Howlader, SF Altekruse, EJ Feuer, L Huang, A Mariotto, BA Miller, DR Lewis, MP Eisner, DG Stinchcomb, BK Edwards, (eds). *SEER Cancer Statistics Review, 1975-2006*, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2006, based on November 2008 SEER data submission, posted to SEER website, 2009.

Positive advances create new challenges though, including providing rehabilitation and support services to a growing number of cancer survivors of all ages. Depending on the stage of diagnosis, extent and method of treatment, and age, survivors may face physical, psychological, social, spiritual, and financial issues. With cancer survivors living longer, there is a need to promote health and prevent secondary (or unrelated) disease.

Childhood cancer survivors and their families face additional challenges. Young cancer survivors must cope with issues of fertility, heart failure, cognitive development, and prevention and screening for secondary cancers, as well as other psychosocial and financial issues.

The goals below build on the achievements of the last five years and are guided by a 2004 assessment and focus groups conducted the same year, identifying the specific needs of cancer survivors in Maine. The findings reveal that many survivors and caregivers are unaware of the support offered, or that services like pain management are even available. The assessment also suggests that care providers are uncomfortable and unsure about how to discuss survivorship issues with patients and families. The goals and objectives outlined here reflect Maine's continued commitment to cancer survivors, their loved ones, and their care providers.

Goals and Objectives: Rehabilitation and Survivorship

Goal 14: Increase awareness and utilization of rehabilitation and survivorship services throughout Maine.

Objective 14.1: Increase by five the number of ACoS-accredited cancer treatment centers and cancer-treating hospitals that provide a written survivorship care plan to patients and their primary care physicians at the end of treatment by 2015. (Baseline: current practice at ACoS hospitals, source to be established, 2010)

Strategies:

1. Survey cancer centers, hospitals, and primary care physicians to learn about the type and quality of survivorship care plans currently in use.
2. Promote the use of survivorship care plans to both patients and cancer care professionals.

Objective 14.2: Provide at least two opportunities per year for healthcare professionals to learn about rehabilitation and survivorship topics through 2015. (Baseline: 0, source to be established, 2010)

Strategies:

1. Support assessment of educational gaps through networking and collaborate with Maine organizations to provide education that addresses gaps.
2. Promote professional education opportunities using the Consortium's communication resources.

Objective 14.3: Promote use of shared decision-making opportunities through the provision of navigation services for patients and families within at least five of Maine's ACoS-accredited cancer centers and cancer-treating hospitals by 2015. (Baseline: to be determined, Maine Cancer Consortium, 2010)

Strategies:

1. Assess annually the number of facilities with patient navigation services.
2. Advocate for funding for the provision of a patient navigator in each cancer treatment center or cancer-treating hospital.



3. Promote inclusion of shared decision-making and patient empowerment in patient navigator training and education.
4. Promote patient and family education regarding decision-making tools and shared decision-making opportunities throughout the cancer continuum.

Objective 14.4: Increase to 50% the proportion of cancer care teams that use quality-of-life tools by 2015. (Baseline: to be established, simple survey of Maine cancer centers, 2011)

Strategies:

1. Assess number of Maine cancer care teams that know about and use evidence-based quality-of-life tools (e.g., Distress Management Guidelines, Fatigue Management Guidelines) or other comparable tools.
2. Promote the use of evidence-based quality-of-life tools.

Objective 14.5: Identify core services for rehabilitation and survivorship, and extend a basic level of core services, including transportation and lodging, to all 16 Maine counties by 2015. (Baseline: 346 listed services, American Cancer Society Connection database, 2010)

Strategies:

1. Review services currently listed in American Cancer Society Connection database, identify any gaps in categories of service, and administer additional assessment if necessary to establish a baseline.
2. Promote consistent statewide survivorship messaging to establish social norm that "survivorship begins at the moment of diagnosis and extends for the balance of life."
3. Identify and promote patient navigation services (both paid and volunteer) in cancer centers and cancer-treating hospitals that provide treatment for more than 250 patients annually.

Objective 14.6: Assess existing rehabilitation and survivorship services, emerging needs, and existing gaps for children and adolescents diagnosed with cancer by 2015. (Baseline: NA, Maine Cancer Consortium, 2010)

Strategies:

1. Identify treatment centers, support groups, community groups and organizations, and non-government organizations that have contact with child and adolescent cancer survivors and their families.
2. Administer an assessment to these organizations and their clients to better understand the services offered and existing gaps.



Palliation and End-of-Life Care

Palliative Care

Palliative care focuses on improving a patient's quality of life during and after cancer treatment. It includes pain management and management of other distressing symptoms such as apprehension, anxiety, fatigue, different levels of physical function, spiritual concerns, social worries, and other characteristics that make individuals who they are. Palliative care clinicians help patients establish goals of care ranging from curative treatment to a predominant focus on quality of life, even when curative treatment may not be possible. These professionals help patients navigate their cancer treatment journeys, empowering them to choose the right path for themselves at the many decision points they face.

Thirty percent of people with cancer have physical pain at the time of diagnosis, and 65% to 85% have pain when their disease is advanced.^{xxvii} In most cases, cancer pain can be effectively treated. By extending pain relief to more Mainers with cancer, it is possible for many to avoid unnecessary suffering, disability, and job loss, and experience an overall improved quality of life with cancer.

Many cancer patients need help understanding how the illness and its treatment will affect them, and which services are available to relieve and manage their physical and psychological symptoms. They need support and the tools to help make some difficult decisions, and most patients have several physicians to help navigate the complexities of their care. Palliative care professionals help coordinate the care and communication between a patient and his or her healthcare professionals.

End-of-Life Care

Great strides have been made in cancer detection and treatment, and many cancer survivors in the U.S. live long lives. For others, cancer may be a terminal illness. In Maine, cancer is one of the leading causes of death, and the need for high quality end-of-life services is essential.

It is difficult for many people to talk about death, and may be especially hard for those who have cancer, their loved ones, and healthcare professionals who have been trained to cure illnesses. Western culture does not provide many tools for talking about, and accepting, death or the dying process, and this greatly increases the challenge of providing beneficial end-of-life care. People are often unprepared to think about their options, and may be reluctant to learn about services and support. Lack of adequate insurance coverage for end-of-life services also elevates challenges at this stage of cancer care.

End-of-Life Care for Children

Certain issues in palliative and end-of-life care are unique to, or particularly evident with, children. For example, some drugs used to treat pain, nausea, and other symptoms in adults have yet to be tested or labeled for use in infants, children, or adolescents. Pediatricians may have inadequate information to guide their choices of drugs and minimize dangerous side effects. A more comprehensive approach to this care is needed for the youngest of cancer patients.



Regardless of the decisions made about curative or life-prolonging treatments, children with life-threatening medical problems and their families should have access to accurate information and excellent supportive care that offers physical, emotional, and spiritual comfort from the time of diagnosis through death and into bereavement, if death is inevitable. Palliative care should benefit children who survive a life-threatening medical diagnosis as well as those who do not, and should support the families of children no matter the prognosis or outcome.

Goals and Objectives: Palliation and End-of-Life Care

Goal 15: Ensure that Mainers who have been diagnosed with cancer can access appropriate palliative care through treatment and beyond, as well as hospice care at the end of life.

Objective 15.1: Increase to 25% the proportion of Maine cancer treatment centers and hospitals that offer interdisciplinary palliative care services by 2015. (Estimated baseline: 15%, MaineHealth Palliative Care work group, 2010)

Strategies:

1. Continue to collect appropriate data on palliative care services for both children and adults.
2. Promote education of health professionals about how interdisciplinary palliative care positively affects cost effectiveness, quality of care, and outcomes.

Objective 15.2: Ensure at least 50% of palliative care programs within acute care hospitals annually measure and report on pain metrics, and at least two additional National Quality Forum (NQF) palliative care measures, through 2015. (Baseline: 0, source to be determined, 2010)

Strategies:

1. Assess the number of ACoS-accredited programs that measure and report on pain metrics and additional NQF measures.
2. Promote the use of NQF measures and the importance of reporting on quality.

Objective 15.3: Increase by 10% the proportion of nursing facilities that provide access to palliative care and hospice services for their residents by 2015. (Baseline: 0, source to be determined, 2010)

Strategies:

1. Partner with the Maine Healthcare Association to create and administer an assessment survey.
2. Promote education of nursing facility administrators regarding benefits of hospice and palliative care services.
3. Advocate for inclusion of hospice and palliative care education in nursing facility administrator training.



Objective 15.4: Propose recommendations for increasing access to palliative care and hospice services statewide by end of 2015. (Baseline: 0, source to be determined, 2010)

Strategies:

1. Partner with collaborating organizations to understand statewide needs.
2. Support stakeholders planning discussion.
3. Promote strategic recommendations.

Objective 15.5: Increase to 35% the proportion of Medicare patients in Maine that use palliative care and hospice benefits when needed by 2015. (Baseline: 32%, *Hospice Analytics*, 2008)

Strategies:

1. Support continued market research to assess public awareness of hospice and palliative care.
2. Promote use of plain language definitions of hospice and palliative care for use in public education and outreach statewide, and disseminate these messages.
3. Promote education of providers regarding benefits of hospice and palliative care services.

Objective 15.6: Implement the *Physician Orders for Life Sustaining Therapy (POLST)** Paradigm program at five acute care hospitals and 10 nursing facilities in Maine by 2015, in order to improve the identification and respect for patient wishes and care at the end of life. (Baseline: 0, Maine POLST Coalition, 2010)

Strategies:

1. Continue to foster the use of advanced directives and care plans during and after the adoption of a statewide POLST Paradigm program.
2. Support the Maine POLST Coalition in tracking and promoting stages of implementation.

Objective 15.7: Promote at least two professional educational opportunities per year on palliative care or hospice through 2015. (Baseline: 0, Maine Cancer Consortium, 2010)

Strategies:

1. Promote hospice education programs in Maine.
2. Improve access to educational opportunities including those offered through web-based communications and self-study.
3. Develop partnerships to further promote educational opportunities to healthcare professionals statewide.
4. Publicize the number of healthcare professionals certified in palliative care.

* Physician Orders for Life Sustaining Treatment (POLST) promotes patient engagement in health care decisions especially toward the end of life. POLST requires that a patient and his/her health professional discuss goals of care for a patient's current condition and choices about treatment options. The POLST form serves as a set of medical orders and provides much more detail than an advance directive; however, POLST is not a replacement for an advance directive and should be used in a complementary fashion.





**WORKING TOGETHER TO
CHANGE CANCER IN MAINE**



WORKING TOGETHER TO CHANGE CANCER IN MAINE

Implementation

In order to be successful in preventing and controlling cancer in Maine, a strategic plan, people to execute the plan, funding and resources to support this work, and accountability to confirm the achievement of goals and objectives, are all essential. The Maine Cancer Consortium was established to take on and lead these integral efforts.

Consortium members and organizations are leaders in carrying out the statewide tasks as defined by the *Maine Cancer Plan*, and expanding work in all aspects of cancer in Maine. To maintain accountability and track progress of Maine's accomplishments and advancements, members of the Consortium reflect annually on the goals and objectives defined by this plan, and assess any change from baseline measures. More information on tracking progress is included in the "Evaluation" section of this plan.

While progress on each objective is measured by comparison to baseline, it is important to note that, unlike previous plans, the strategies in this plan are dynamic in nature. These are not hard-and-fast methods of affecting change, but rather ideas of how change might happen. Strategies are proposed as starting points, but do not represent the limit of all that can be done.

The Consortium recognizes that over five years there are sure to be changes and advances in programs, organizations, funding, technology, and the clinical arena. With each annual assessment of the *Maine Cancer Plan*, Consortium members have the opportunity to report on all approaches taken, including those that expand beyond these pages, to impact each objective and propel the Consortium towards achieving each goal and objective.

Goals and Objectives: Implementation

Goal 16: Implement a five-year cancer control and prevention plan to enhance the cancer control initiative in Maine.

Objective 16.1: Support and increase the synergy* of the Maine Cancer Consortium to 3.5 by 2015. (Baseline: 3.0, *Maine Cancer Consortium Partnership Survey, 2010*)

Objective 16.2: Achieve at least 75% of the objectives in the *Maine Comprehensive Cancer Control Plan: 2011-2015* by 2015. (Baseline: 0, Maine Cancer Consortium activity monitoring, 2010)

* Synergy refers to how well partners work together and enhance or build on each others' individual work to make the overall partnership stronger and more effective.



Communications

The *Maine Cancer Plan* relies on the work of hundreds of professionals and organizations across the state, and requires regular, coordinated communication. Consortium staff and leadership communicate with members primarily through the Consortium website and listserv. With an evolving and expanding website, Consortium members have access to reports, updates, news, and ultimately, the *Maine Cancer Plan*. The listserv provides more timely and specific information and updates about cancer control activities and the work of the Consortium. As the Consortium moves into the 2011-2015 period, staff looks to continuously improve these methods and enhance the ability of members to collaborate and work synergistically from every area of the state.

Goals and Objectives: Communications

Goal 17: Enhance communication efforts of the Maine Cancer Consortium throughout the implementation of the *Maine Comprehensive Cancer Control Plan: 2011-2015*.

Objective 17.1: Organize, host, and promote participation in quarterly conference calls for paralleling content areas to inspire collaboration and initiate synthesis of cancer work statewide through 2015.

Objective 17.2: Maintain the Consortium website, and promote use of the Consortium's listserv for mass communication, through 2015.

Objective 17.3: Employ new and emerging technologies as appropriate to support communication needs through 2015.

Goal 18: Address emerging membership needs of the Maine Cancer Consortium throughout implementation of the *Maine Comprehensive Cancer Control Plan: 2011-2015*.

Objective 18.1: Maintain the membership of the Consortium throughout 2015.
(Baseline: 230 members, Maine Cancer Consortium, 2010)

Objective 18.2: Maintain and expand organizational membership of the Consortium throughout 2015. (Baseline: 95 organizations, Maine Cancer Consortium, 2010)

Evaluation

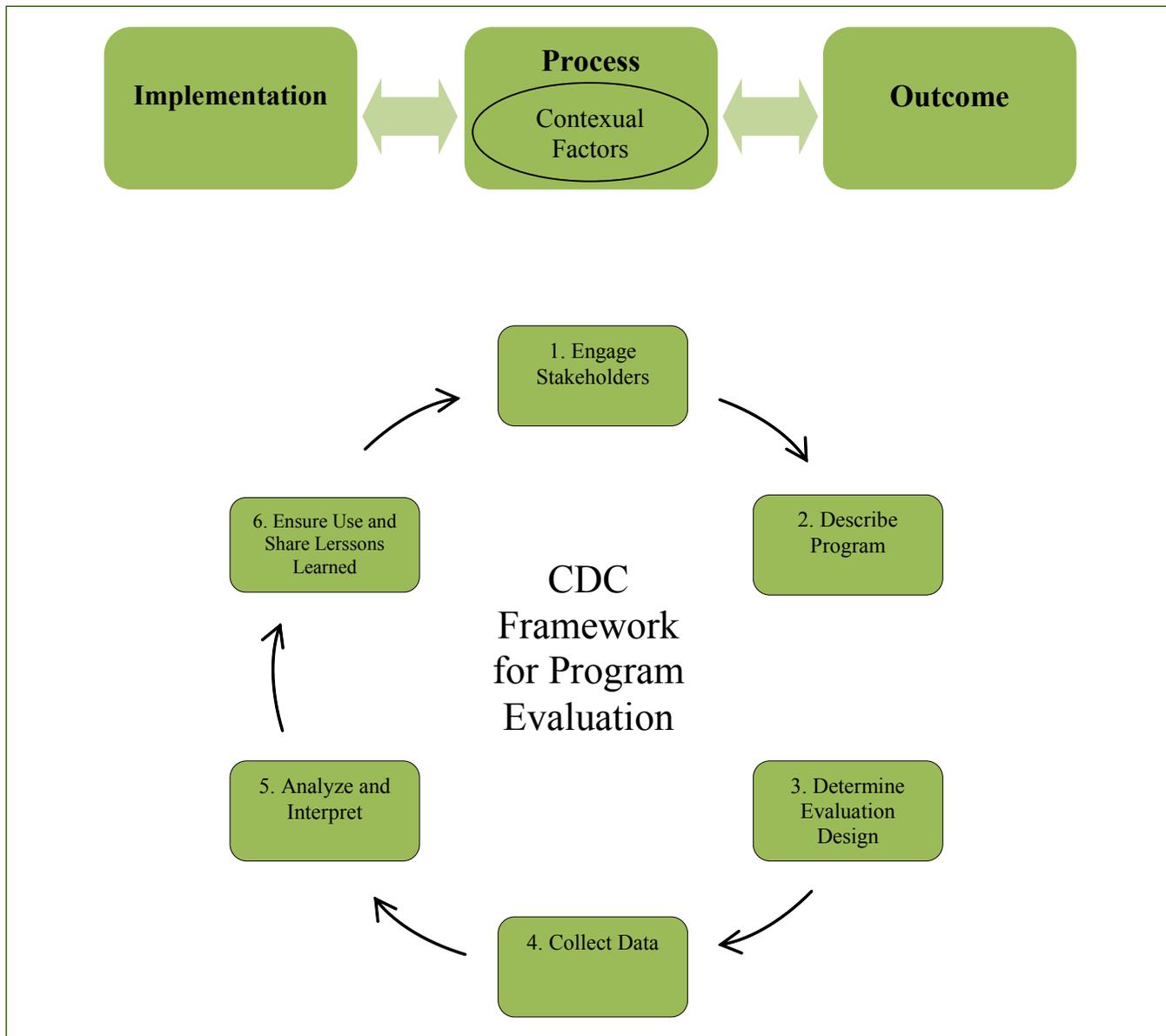
Evaluation is a critical and central component of Maine's Comprehensive Cancer Control initiatives. It is through the evaluation process that activities can be monitored, progress can be measured, and a foundation for future work in cancer control can be established. Comprehensive Cancer Control initiatives that are evaluated regularly include (1) the Consortium; (2) the Maine Comprehensive Cancer Control Program; and (3) the five-year *Maine Cancer Plan*.



The evaluation of both the Consortium and the *Maine Cancer Plan* are based on the Centers for Disease Control and Prevention’s (CDC’s) program evaluation framework for public health.^{xxviii} As seen in Figure 14, the overall Maine Comprehensive Cancer Control evaluation design includes three components that interface with CDC’s Program Evaluation Framework.

The first component focuses on the implementation of initiative activities that collectively and theoretically result in improvements in health outcomes and other programmatic objectives. The second component is designed to assess the process aspects of the initiative, including the evaluation of how contextual factors affect implementation. The third component attempts to determine the outcomes or impact of the initiative. Each component is executed utilizing the overarching framework developed by CDC for program evaluation. Experts agree that if used together, these three components can improve effectiveness and promote future sustainability.^{xxix}

Figure 14: Comprehensive Cancer Control Evaluation Design



Data source: U.S. Centers for Disease Control and Prevention.

Goals and Objectives: Evaluation

Goal 19: Support and enhance the Maine Comprehensive Cancer Control initiative through independent evaluation.

Objective 19.1: Participate in annual evaluation activities each year of the *Maine Comprehensive Cancer Control Plan: 2011-2015*. (Evaluation measure: annual *Maine Comprehensive Cancer Control Initiative Evaluation Report*)

Strategies:

1. Develop and disseminate a biannual partnership survey to address partnership satisfaction, incorporating results and recommendations from previous surveys.
2. Develop and disseminate a biannual Consortium membership survey to address member satisfaction, incorporating results and recommendations from previous surveys.
3. Annually document progress related to the strategies in the *Maine Comprehensive Cancer Control Plan: 2011-2015*, and provide any necessary recommendations for action regarding plan goals, strategies and objectives.

Objective 19.2: Develop and disseminate the annual Maine Comprehensive Cancer Control Initiative Evaluation Report through 2015. (Evaluation measure: annual *Maine Comprehensive Cancer Control Initiative Evaluation Report*)

Strategies:

1. Collect, analyze, and compile data from all appropriate sources to create an annual evaluation report.
2. Disseminate the annual evaluation report to Consortium members and partners statewide.

Objective 19.3: Develop and implement an assessment of the process used to create the *Maine Cancer Plan*, including recommendations for continuous assessment, review, and potential adjustments over the five-year period. (Evaluation measure: annual *Maine Comprehensive Cancer Control Initiative Evaluation Report*)

Strategies:

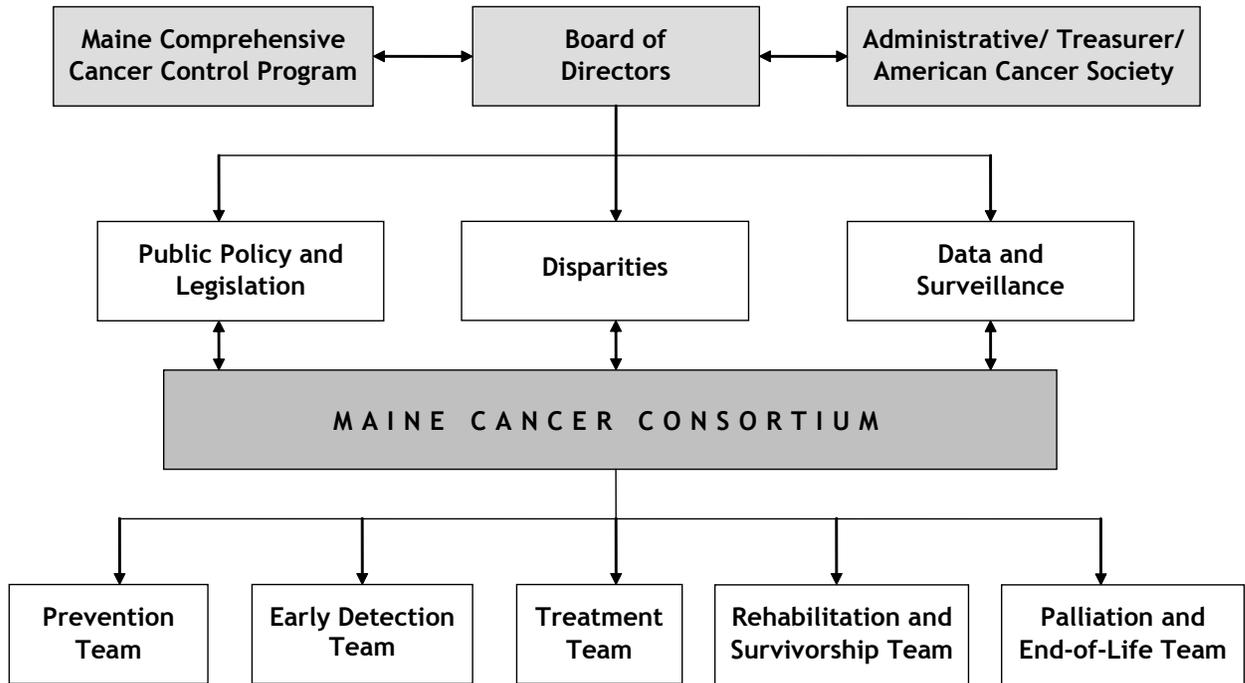
1. Meet with Consortium teams and leadership to determine appropriate and measurable indicators for monitoring progress on the *Maine Comprehensive Cancer Control Plan: 2011-2015*.
2. Revise the activity monitoring process and protocol based on indicators identified by Consortium teams.
3. Develop a plan and schedule for tracking progress on the *Maine Comprehensive Cancer Control Plan: 2011-2015* at designated intervals over the five years of plan implementation.





APPENDICES

Appendix A: 2010 Maine Cancer Consortium Organizational Chart



Appendix B: Maine Cancer Consortium Member Organizations

2-1-1 Maine
ACCESS Health
American Cancer Society
Androscoggin Home Care and Hospice
Bennett Breast Care Center
Beth C. Wright Cancer Center
Body Smart
Burgess Advertising
Calais Regional Hospital
Cancer Care Center at Penobscot Bay Medical Center
Cancer Care Center of York County
Cancer Community Center
CancerCare of Maine
Center for Tobacco Independence at
Maine Medical Center
Central Maine Medical Center
City of Portland, Public Health Division
CLEAN: Maine
Coalition Against Tobacco
Coastal Healthy Communities Coalition
Communities Promoting Health
Coordinated Care Services
Dermatology Associates
Eastern Maine Medical Center
Family Planning Association of Maine
Franklin Memorial Hospital
Genetech
Goodall Hospital
Harold Alfond Center for Cancer Care
Health Reach Network
Healthy Acadia
Healthy Aroostook
Healthy Communities Coalition
of Greater Franklin County
Healthy Living Project
Healthy Maine Partnerships
Healthy Peninsula Project
Inland Hospital
Kennebec Pharmacy & Home Care
Lung Cancer Alliance
Maine Academy of Family Physicians
Maine Association of Mental Health Services
Maine Breast & Cervical Health Program
Maine Cancer Foundation
Maine Cancer Registry
Maine Center for Cancer Medicine
Maine Center for Disease Control and Prevention
Maine Center for Public Health
Maine Coalition to Fight Prostate Cancer
Maine Comprehensive Cancer Control Program
Maine Dartmouth Family Practice
Maine Department of Education
Maine Department of Environmental Health,
Division of Health Engineering
Maine Department of Health and Human Services,
Public Health Nursing
Maine General Medical Center
Maine Hospice Council
Maine Hospital Association
Maine Medical Center
Maine Municipal Association
Maine Office of Data, Research, and Vital Information,
BRFSS Program
Maine Office of Minority Health
Maine Physical Activity and Nutrition Program
Maine Primary Care Association
MaineHealth
Mayo Regional Hospital
Melanoma Foundation of NE
Mercy Hospital
Mid Coast Hospital
Millinocket Regional Hospital
Muskie School of Public Service
National Lung Cancer Partnership
Novartis
Parkview Adventist Medical Center
Partnership for a Healthy Community
Partnership for a Healthy Penobscot
Partnership for a Tobacco-Free Maine
Patrick Dempsey Center for Cancer Hope and Healing
Penobscot Bay Medical Center
Penquis Health Services
Piscataquis Public Health Council
Pleasant Point Health Center
Portland Gastroenterology Center
Redington-Fairview General Hospital
River Valley Healthy Communities
Sheepscot Valley Health Center
Somerset Heart Health
Southern Maine Medical Center
SPRINT for Life
St Mary's Regional Medical Center
St. John Valley Partnership
Stephens Memorial Hospital
The Aroostook Medical Center
Togus VA Medical Center
United Way of Greater Portland
United Way of Mid Maine
University of Maine System
University of New England
Waldo County General Hospital
York Hospital



Appendix C: Legislation

1. HP1495, LD 2109, ITEM 1, 123RD MAINE STATE LEGISLATURE AN ACT RELATING TO INSURANCE COVERAGE FOR COLORECTAL CANCER EARLY DETECTION

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 24-A MRSA §2763 is enacted to read:

§ 2763. Coverage for colorectal cancer screening

1. Required coverage. All individual health insurance policies and contracts must provide coverage for colorectal cancer screening for individuals who are:

- A. Fifty years of age or older;
- B. Less than 50 years of age and at high risk for colorectal cancer according to applicable colorectal cancer screening guidelines; or
- C. Less than 50 years of age and symptomatic for colorectal cancer or other colon diseases.

2. Application. The requirements of this section apply to all policies, contracts and certificates executed, delivered, issued for delivery, continued or renewed in this State on or after January 1, 2009. For purposes of this section, all contracts are deemed to be renewed no later than the next anniversary of the contract date.

Sec. 2. 24-A MRSA §2847-N is enacted to read:

§ 2847-N. Coverage for colorectal cancer screening

1. Required coverage. All group health insurance policies, contracts and certificates must provide coverage for colorectal cancer screening for individuals who are:

- A. Fifty years of age or older;
- B. Less than 50 years of age and at high risk for colorectal cancer according to applicable colorectal cancer screening guidelines; or
- C. Less than 50 years of age and symptomatic for colorectal cancer or other colon diseases.

2. Application. The requirements of this section apply to all policies, contracts and certificates executed, delivered, issued for delivery, continued or renewed in this State on or after January 1, 2009. For purposes of this section, all contracts are deemed to be renewed no later than the next anniversary of the contract date.

Sec. 3. 24-A MRSA §4254 is enacted to read:

§ 4254. Coverage for colorectal cancer screening

1. Required coverage. All health maintenance organization individual and group health insurance policies, contracts and certificates must provide coverage for the purchase of colorectal cancer screening for individuals who are:

- A. Fifty years of age or older;
- B. Less than 50 years of age and at high risk for colorectal cancer according to applicable colorectal cancer screening guidelines; or
- C. Less than 50 years of age and symptomatic for colorectal cancer or other colon diseases.

2. Application. The requirements of this section apply to all policies, contracts and certificates executed, delivered, issued for delivery, continued or renewed in this State on or after January 1, 2009. For purposes of this section, all contracts are deemed to be renewed no later than the next anniversary of the contract date.

Sec. 4. 24 MRSA §2317-B, sub-§12-C is enacted to read:

12-C. Title 24-A, sections 2763, 2847-N and 4254. Coverage for colorectal cancer screening, Title 24-A, sections 2763, 2847-N and 4254;

SUMMARY

This bill requires health insurance policies, contracts and certificates to provide coverage for colorectal cancer screening. The provisions of this bill apply to all policies, contracts and certificates issued or renewed on or after January 1, 2009.



**2. HP1396, LD 2012, ITEM 1, 123RD MAINE STATE LEGISLATURE
AN ACT TO PROTECT CHILDREN IN VEHICLES FROM SECONDHAND SMOKE**

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 22 MRSA §1549 is enacted to read:

§ 1549. Smoking in vehicles when minor is present

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Motor vehicle" has the same meaning as in Title 29-A, section 101, subsection 42.

B. "Smoking" means inhaling, exhaling, burning or carrying a lighted cigarette, cigar, pipe, weed, plant, regulated narcotic or other combustible substance.

2. Prohibition. Smoking is prohibited in a motor vehicle by the operator or a passenger when a person who has not attained 16 years of age is present in that motor vehicle, regardless of whether the motor vehicle's windows are open.

3. Prohibition on inspection or search. A motor vehicle, the contents of the motor vehicle or the operator or a passenger in the motor vehicle may not be inspected or searched solely because of a violation of this section.

4. Not a moving violation. A violation of this section is a not a moving violation as defined in Title 29-A, section 101, subsection 44.

5. Penalty; warning. Notwithstanding section 1545, penalties for violations of this section are as set out in this subsection.

A. From September 1, 2008 to August 31, 2009, a law enforcement officer shall give a written warning to an operator or passenger of a motor vehicle who is in violation of this section.

B. Beginning September 1, 2009, a person who violates this section commits a civil violation for which a fine of \$50 must be assessed, except that a law enforcement officer may give a written warning to the operator or a passenger of a motor vehicle who is in violation of this section.

SUMMARY

This law applies to drivers and passengers regardless of whether vehicle windows are open. The law does not permit inspection or search, nor is this a moving violation. Effective September 1, 2009, persons in violation commit a civil violation for which a fine of \$50 must be assessed, except that a law enforcement officer can choose to give a written warning instead of the fine.



**3. SP0026, LD 67, ITEM 1, 124TH MAINE STATE LEGISLATURE
AN ACT TO PROTECT BEACHES IN MAINE'S STATE PARKS**

Emergency preamble. Whereas, acts and resolves of the Legislature do not become effective until 90 days after adjournment unless enacted as emergencies; and

Whereas, this legislation needs to take effect before the 2009 summer recreational season begins; and

Whereas, in the judgment of the Legislature, these facts create an emergency within the meaning of the Constitution of Maine and require the following legislation as immediately necessary for the preservation of the public peace, health and safety; now, therefore,

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 22 MRSA §1580-E is enacted to read:

§ 1580-E. Smoking on beaches

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings:

A. "Enclosed area" has the same meaning as in section 1541, subsection 2

B. "Public place" has the same meaning as in section 1541, subsection 4

C. "Smoking" has the same meaning as in section 1541, subsection 6

D. "State historic site" has the same meaning as "historic site" in Title 12, section 1801, subsection 5; and

E. "State park" has the same meaning as "park" in Title 12, section 1801, subsection 7.

2. Smoking prohibited. A person may not smoke tobacco or any other substance in, on or within 20 feet of a beach, playground, snack bar, group picnic shelter, business facility, enclosed area, public place or restroom in a state park or state historic site.

3. Signs; public education. To the extent possible within existing budgeted resources, the Maine Center for Disease Control and Prevention shall erect signs and undertake public education initiatives regarding the prohibition on smoking in certain areas of state parks and state historic sites.

Emergency clause. In view of the emergency cited in the preamble, this legislation takes effect when approved.

SUMMARY

A person may not smoke tobacco, or any other substance in, on or within 20 feet of a beach, playground, snack bar, group picnic shelter, business facility, enclosed area, public place or restroom in a state park or state historic site.



**4. SP0137, LD 395, ITEM 1, 124TH MAINE STATE LEGISLATURE
RESOLVE, TO FURTHER REGULATE THE USE OF TANNING BOOTHS BY MINORS**

Amend the resolve by striking out everything after the title and before the summary and inserting the following:

Emergency preamble. Whereas, acts and resolves of the Legislature do not become effective until 90 days after adjournment unless enacted as emergencies; and

Whereas, the use of tanning facilities by minors presents a potentially serious public health issue; and

Whereas, the adoption of rules regarding the use of tanning facilities by minors is necessary to protect minors from exposure to ultraviolet radiation prior to the coming summer season; and

Whereas, in the judgment of the Legislature, these facts create an emergency within the meaning of the Constitution of Maine and require the following legislation as immediately necessary for the preservation of the public peace, health and safety; now, therefore, be it

Sec. 1 Amend the rules for the use of tanning equipment. Resolved: That the Department of Health and Human Services shall amend the rules for the use of tanning facilities by minors in Rule Chapter 223, Part T as provided in this section. Rules adopted pursuant to this section are routine technical rules as defined by the Maine Revised Statutes, Title 5, chapter 375, subchapter 2-

A. The rules must:

1. For minors under 14 years of age, prohibit the use of tanning devices;
2. For minors 14 years of age and older:

A. Require the tanning facility operator to confirm the identification of the minor and the minor's parent or legal guardian;

B. Require the tanning facility to obtain the written consent of the minor's parent or legal guardian and written acknowledgement by the minor and the parent or legal guardian that they have read and understood the information required to be disclosed by Rule Chapter 223, Part T, section 12, paragraph A, subparagraphs (1) and (3). Both written consent and written acknowledgement must be executed in the presence of the operator of the tanning facility;

C. Limit the effect of the parent or legal guardian's written consent to one year and allow revocation of consent by the parent or legal guardian at any time; and

D. Require the presence of the minor's parent or legal guardian for minors 14 and 15 years of age.

The department shall amend the rules to provide an increase in the licensing fees for tanning facilities to assist in covering the cost of regulation of the facilities; and be it further

Sec. 2 Work group; report. Resolved: That the Department of Health and Human Services shall convene a work group of representatives of operators of tanning facilities and representatives of a statewide consortium active in the prevention and treatment of skin cancer and other interested parties to examine existing rules, training requirements and compliance issues and funding methods and shall report to the Joint Standing Committee on Health and Human Services by January 15, 2010. The department shall provide notification of the dates, times and locations of the meetings of the work group to members of the joint standing committee. The joint standing committee is authorized to submit legislation on the report to the Second Regular Session of the 124th Legislature.

Emergency clause. In view of the emergency cited in the preamble, this legislation takes effect when approved.'

SUMMARY

This amendment is the majority report of the committee and replaces the resolve. It adds emergency language and requires the Department of Health and Human Services to adopt rules regarding the use of tanning facilities by minors. It requires the department to convene a work group of interested parties and to report to the Joint Standing Committee on Health and Human Services by January 15, 2010. It authorizes the committee to submit legislation to the Second Regular Session of the 124th Legislature.



**5. HP0878, LD 1259, ITEM 1, 124TH MAINE STATE LEGISLATURE
AN ACT TO INCREASE ACCESS TO NUTRITION INFORMATION**

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 22 MRSA §2491, sub-§2-A is enacted to read:

2-A. Chain restaurant. "Chain restaurant" means an eating establishment that does business under the same trade name in 15 or more locations nationwide that offer predominantly the same type of meals, food, beverages or menus, regardless of the type of ownership of an individual location. "Chain restaurant" does not include a grocery store.

Sec. 2. 22 MRSA §2491, sub-§7-A is enacted to read:

7-A. Food display tag. "Food display tag" means a written or printed description of a food or beverage item, such as a label or placard, placed in the vicinity of the food or beverage item identifying the type or price of the food or beverage.

Sec. 3. 22 MRSA §2491, sub-§7-B is enacted to read:

7-B. Grocery store. "Grocery store" means a store primarily engaged in the retail sale of canned food, dry goods, fresh fruits and vegetables, fresh meats, fish and poultry. "Grocery store" includes a convenience store, but does not include a separately owned eating establishment located within a grocery store.

Sec. 4. 22 MRSA §2491, sub-§7-C is enacted to read:

7-C. Menu. "Menu" means a written or printed list describing food or beverage items offered for sale at an eating establishment that may be distributed on or off the premises, but does not include a menu board.

Sec. 5. 22 MRSA §2491, sub-§7-D is enacted to read:

7-D. Menu board. "Menu board" means a list of food or beverage items offered for sale at an eating establishment that is posted in a public area for viewing by multiple customers, including a backlit marquee sign, chalkboard or drive-through menu sign.

Sec. 6. 22 MRSA §2500-A is enacted to read:

§ 2500-A. Menu labeling for chain restaurants

1. Caloric information. A chain restaurant shall state on a food display tag, menu or menu board the total amount of calories per serving as usually prepared and offered for sale of each food and beverage item listed for sale on the food display tag, menu or menu board. The statement of calories required in this subsection must be:

A. Clear and conspicuous;

B. Adjacent to or in close proximity and clearly associated with the item to which the statement refers; and

C. Printed in a font and format at least as prominent in size and appearance as the name or the price of the item to which the statement refers.

Information required by this subsection must be based upon scientific methods, and the information must be expressed in a manner consistent with United States Food and Drug Administration regulations. A chain restaurant violates this subsection if the chain restaurant displays the information required by this subsection if the amount of the calories listed for a food or beverage item varies more than 20% from the amount of calories found through a nutrient analysis of a representative sample of the food or beverage item.

2. Required statement. A menu or menu board or written nutrition information provided to a customer by a chain restaurant must contain the following statement in a clear and conspicuous manner and in a prominent location: "To maintain a healthy weight, a typical adult should consume approximately 2,000 calories per day; however, individual calorie needs may vary." A menu, menu board or written nutrition information provided to a customer by a chain restaurant may include the following statement or a statement similar to the following: "Nutrition information is based upon standard recipes and product formulations; however, modest variations may occur due to differences in preparation, serving sizes, ingredients or special orders."



3. Different varieties. For a food or beverage item that is listed as a single item but includes more than one variety, the caloric information required under subsection 1 for that item must be the median value of calories for all varieties offered for that item if the caloric information for each variety of the item is within 20% of the median for that item. If the caloric information required by subsection 1 for a variety of a food or beverage item is not within 20% of the median for that item, then the caloric information must be stated for each variety of that item. If a food display tag is used to identify a specific variety of a food or beverage item, the caloric information required by subsection 1 must be for that specific variety of the item.

4. Exceptions. A chain restaurant is not required to provide information pursuant to subsection 1 for:

- A. An item offered for a limited time that appears on a menu, menu board or food display tag for less than 30 days per year;
- B. A condiment or other item offered to a customer for general use without charge;
- C. An item sold to a customer in a manufacturer's original sealed package that contains nutrition information as required by federal law; or
- D. A custom order for a food or beverage item that does not appear on a menu, menu board or food display tag.

5. Enforcement. The department or an agent authorized to inspect an eating establishment under section 2499 shall enforce the provisions of this section but is not required to verify the accuracy of the information required by this section. The Maine Center for Disease Control and Prevention may request that a franchisor or corporate owner of a chain restaurant provide documentation of the accuracy of the information required by subsection 1.

Sec. 7. Effective date. This Act takes effect May 1, 2010.

SUMMARY

This bill requires a chain restaurant, which is a restaurant with the same trade name and the same type of food, meals and menus as 15 or more restaurants nationwide, to provide accurate calorie information on its menus, menu boards and food display labels for the food and beverage items it regularly sells, not including limited-time offers, condiments, items in sealed manufacturer's packaging with nutrition information or custom orders. The bill also requires a chain restaurant to state on its menu and menu boards: "To maintain a healthy weight, a typical adult should consume approximately 2,000 calories per day; however, individual calorie needs may vary." This bill allows a chain restaurant to state on its menu and menu boards: "Nutrition information is based upon standard recipes and product formulations; however, modest variations may occur due to differences in preparation, serving sizes, ingredients or special orders."



**6. HP0255, LD 319, ITEM 1, 124TH MAINE STATE LEGISLATURE
AN ACT TO TRACK THE PREVALENCE OF CHILDHOOD OBESITY IN MAINE**

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 20-A MRS §6455 is enacted to read:

§ 6455. Body mass index data

1. Collection of data. A school nurse shall collect body mass index data from students in the school administrative unit in accordance with rules of the Department of Health and Human Services.
2. Reporting of data. A school nurse shall report the data collected under subsection 1 to the Department of Health and Human Services, Maine Center for Disease Control and Prevention.
3. Rules. The Department of Health and Human Services shall adopt routine technical rules in accordance with Title 5, chapter 375, subchapter 2-A to implement this section. The rules must at a minimum:
 - A. Establish a schedule and protocol for the collection of data from students; and
 - B. Provide a method for uniform reporting of the collected data to the Maine Center for Disease Control and Prevention.

SUMMARY

This bill would create a protocol for all school nurses to follow in the collection of body mass index data from children and provide a method for uniform reporting to the Department of Health and Human Services, Maine Center for Disease Control and Prevention.



7. HP0983, LD 1407, ITEM 1, 124TH MAINE STATE LEGISLATURE
AN ACT TO IMPLEMENT THE RECOMMENDATIONS OF THE PE4ME PLANNING AND OVERSIGHT TEAM

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 20-A MRSA c. 207-A, sub-c. 4 is enacted to read:

SUBCHAPTER 4

PHYSICAL EDUCATION

§ 4731. Physical Education Program

1. Program established. The Physical Education Program is established in the department.
2. Definitions. As used in this subchapter, unless the context otherwise indicates, the following terms have the following meanings.

- A. "Participant" means a school or school administrative unit that participates voluntarily in the program.
- B. "Physical activity" means bodily movement of any type that may include recreational, fitness and sports activities such as jumping rope, playing soccer and lifting weights and daily activities such as walking, taking the stairs or raking leaves.
- C. "Physical education" means providing to a child, through appropriate instruction, meaningful and challenging content and physical activity, the skills and knowledge needed to establish and sustain an active and physically fit lifestyle.
- D. "Program" means the Physical Education Program established in subsection 1.

3. Program requirements. The commissioner shall develop guidelines and requirements for the program, which must include requiring a participant to progress towards these goals within 3 years of participation:

- A. Provide for all students at least 30 minutes per day of structured moderate to vigorous physical activity, which may include time in physical education instruction;
- B. Provide at least 150 minutes per week of physical education that is evidence-based and health-related and teaches students motor and behavioral skills necessary to develop an active and physically fit lifestyle;
- C. Ensure that the physical education provided is taught by a teacher who has been certified in physical education under chapter 502;
- D. Grade physical education pursuant to section 4708 and report it in a manner consistent with all other subjects taken by a student; and
- E. Require a physical education teacher to attend a workshop on creating physical activity opportunities for all students, including methods to get students outside at all times of the year.

4. Assessment and incentives. The commissioner shall regularly conduct an assessment to accurately determine the number of certified physical education teachers available in the State and the number of physical education teachers necessary to implement the program in every elementary school in the State. The commissioner shall develop and maintain a system of incentives to encourage recruitment of graduates of postsecondary institutions in the State for employment as physical education teachers in the State and for schools or school administrative units to participate in the program, with an additional financial incentive for early adoption or ongoing improvement of the program.

§ 4732. Physical education evaluation

1. Evaluation. The commissioner shall develop and implement an evaluation system for the program.
2. Infrastructure and content. The commissioner shall evaluate the infrastructure and content of a physical education curriculum for a participant every 3 years and conduct separate evaluations for separate grade levels. The evaluation must review:
 - A. The existing physical education infrastructure of the participant including facilities, equipment and schedules for physical education in relation to the ratio of students to teachers, staff education and development opportunities for the staff; and



B. The content of the physical education conducted by the participant and whether it comes close to best practices, including defined curriculum and curriculum elements, active time in class and activities that support lifelong physical activity.

3. Impact. The impact of a physical education curriculum for the students of a participant must be evaluated in an interval and manner determined by the commissioner that will allow the data to be reported per grade, school and administrative unit level on an individual or statewide basis. The evaluation under this subsection must be conducted by a physical education teacher through a fitness assessment of each student to review the health effects of the physical education curriculum on the student including cardio-respiratory fitness, strength, flexibility, body mass index, reported physical activity levels and knowledge and understanding of key physical activity concepts.

4. Reporting to families. A participant shall report to the family of a student individual fitness data collected under subsection 3 concerning that student pursuant to the provisions of chapter 221, subchapter 1.

5. Small, rural or isolated schools. A participant that is a small, rural or isolated school or school administrative unit as determined by the commissioner may receive technical assistance or priority funding for equipment, training or development opportunities under the program.

§ 4733. Rules

The commissioner may adopt rules to carry out the purposes of this subchapter. Rules adopted pursuant to this section are routine technical rules pursuant to Title 5, chapter 375, subchapter 2-A.

Sec. 2. 22 MRSA §263 is enacted to read:

§ 263. Obesity and Chronic Disease Fund

1. Fund established. The Obesity and Chronic Disease Fund, referred to in this section as “the fund,” is established as an interest-bearing account administered by the department.

2. Physical education. The fund may be used to pay for new equipment, new staff training, new personnel, new administrative costs and other expenses not related to an existing physical education program of a participant and for the implementation of the program under Title 20-A, section 4731 and the necessary expenses of the department in the administration of this section.

3. Revenue. Any private or public funds appropriated, allocated or dedicated to the fund must be deposited into the fund as well as income from any other source directed to the fund. All interest earned by the fund becomes part of the fund. Any balance remaining in the fund at the end of the fiscal year does not lapse but is carried forward into subsequent fiscal years.

4. Grants and other incentives. The department may disburse a grant or other incentive from the fund to a participant to carry out the purposes of subsection 2.

5. Withholding. The commissioner may withhold a disbursement from the fund from a participant, as defined in Title 20-A, section 4731, who does not conform to the provisions of Title 20-A, chapter 207-A, subchapter 4.

6. Rules. The commissioner may adopt rules to carry out the purposes of this section. Rules adopted pursuant to this subsection are routine technical rules pursuant to Title 5, chapter 375, subchapter 2-A.

Sec. 3. Assessment. By January 15, 2010 the Commissioner of Education shall conduct a statewide assessment to identify the current teacher capacity and future teacher needs to fulfill the purposes of this Act, current physical education capacities of every elementary school in the State and what evaluation tools are being used at the local level to evaluate physical education students and the success of the Physical Education Program established under the Maine Revised Statutes, Title 20-A, section 4731 and to perform a baseline fitness assessment of all elementary students of a participant of the program.

As part of the assessment, the commissioner shall prepare a report for submission to the Joint Standing Committee on Education and Cultural Affairs and the Joint Standing Committee on Health and Human Services. The report must include a description of the physical education program in existence for the 2009-10 school year for each school in the State, including for each school:

1. The average teacher-to-student ratio for academic classes and the average teacher-to-student ratio for physical education classes;
2. The average minutes of physical education per week per student by grade;



3. The average minutes of recess or other opportunity for physical activity during school hours per week per student by grade; and
4. The physical plant, infrastructure and equipment in place to support the physical education program.

A school administrative unit shall report to the commissioner data required by the commissioner to prepare an assessment under this section that will allow the assessment to be reported by grade, school, school administrative unit and region. Sec. 4. Program implementation oversight. The PE4ME planning and oversight team, established pursuant to Public Law 2007, chapter 102, shall oversee the implementation of the Physical Education Program established in the Maine Revised Statutes, Title 20-A, section 4731 until 2015 and conduct at least 2 meetings per year to carry out the purposes of this Act. The PE4ME planning and oversight team shall submit a report pursuant to this section annually to the joint standing committee of the Legislature having jurisdiction over education matters. If the benchmark under subsection 2 is not met, the PE4ME planning and oversight team shall recommend an immediate adjustment to the implementation schedule in this section to meet the benchmarks under subsections 3, 4 and 5. The Commissioner of Education shall endeavor to implement the Physical Education Program by obtaining the consent of all elementary schools in the State with the following benchmarks:

1. By 2012, 15% of all elementary schools in the State;
2. By 2013, 40% of all elementary schools in the State;
3. By 2014, 65% of all elementary schools in the State;
4. By 2015, 90% of all elementary schools in the State; and
5. By 2016, 100% of all elementary schools in the State.

Sec. 5. Funding resources. The Commissioner of Education shall explore federal and other funding resources available for physical education meeting the guidelines established under the Maine Revised Statutes, Title 20-A, chapter 207-A, subchapter 4.

SUMMARY

This bill:

1. Creates the Physical Education Program, which encourages elementary schools to implement a vigorous physical activity and physical education program involving equipment, teacher training and student physical assessments;
2. Requires evaluation standards for the Physical Education Program including evaluation of the infrastructure and content of the physical education curriculum of each elementary school in the program and the impact of this curriculum on the school's students and requires the Commissioner of Education to make a statewide assessment of the needs of elementary schools to meet the requirements of the program;
3. Establishes the Obesity and Chronic Disease Fund under the administration of the Department of Health and Human Services to fund the Physical Education Program including equipment, staff training and personnel expenses of the schools to implement the program and to provide funds for obesity prevention and promoting healthy school environments; and
4. Requires the Commissioner of Education to explore federal and other funding resources to fund the program.



**8. HP0646, LD 943, ITEM 1, 124TH MAINE STATE LEGISLATURE
AN ACT TO REDUCE LUNG CANCER RATES IN MAINE**

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 14 MRSA §6030-D is enacted to read:

§ 6030-D. Radon testing

1. Testing. Every 5 years a landlord or other lessor of a residential building shall test the air of the residential building for radon. If a residential building required to be tested for radon under this subsection is not connected to a public water system, the landlord or lessor of the residential building must test the air and the water of the residential building for radon.
2. Notification. If a test conducted under subsection 1 reveals a level of radon hazardous to human health, the landlord or lessor of the residential building shall give notice to every residence in the residential building of the presence of and risk associated with radon gas. Notice under this subsection must be given by posting a sign on the residential building's exterior doors and sent by certified mail to every unit in the residential building. A sign placed on an exterior entry door of a residential building under this subsection must remain until the level of radon in the residential building is reduced to a level not hazardous to human health under subsection 3.
3. Mitigation. A landlord or other lessor of a residential building that is subject to a test that reveals a level of radon hazardous to human health must immediately mitigate the level of radon in the residential building until it is reduced to a level not hazardous to human health.
4. Penalty. A person who violates this section commits a civil violation for which a fine of up to \$500 per violation may be assessed. This section is enforceable in either District Court or Superior Court.

SUMMARY

This law, effective September 12, 2009, requires a landlord or anyone renting out a residential building to test the air of the building for radon. Those affected by the law must start testing in 2012 and repeat the test every 10 years after that. If the radon levels are unsafe, the landlord must notify the tenants and correct the problem.



**9. HP 556, LD 820, 124TH MAINE STATE LEGISLATURE
AN ACT TO PROHIBIT SMOKING IN OUTDOOR EATING AREAS**

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 22 MRSA §1550 is enacted to read:

§ 1550. Smoking in outdoor eating areas

1. Definition. As used in this section, “outdoor eating area” means a patio, deck or other property that is partially enclosed or open to the sky that is permitted for outdoor eating or drinking under the control of an eating establishment, as defined in section 2491, subsection 7, as long as food or drink is served by the eating establishment to the public for consumption on the premises.

2. Smoking prohibited. Smoking is prohibited in an outdoor eating area if the outdoor eating area or any portion thereof is open and available for dining and beverage service.

3. Notification; request for compliance. An eating establishment with an outdoor eating area shall post signs in accordance with section 1543, notify its patrons of the prohibition on smoking in outdoor eating areas and request that all persons within an outdoor eating area comply with this section.

SUMMARY

Effective September 12, 2009, smoking is prohibited in all outdoor eating areas including patios, decks or other property including bars, restaurants, dairy bars, and snack bars. The law applies year around, 24 hours a day whenever the business is open and serving food or drink.



10. SP0235, LD 621, ITEM 1, 124TH MAINE STATE LEGISLATURE
AN ACT ALLOWING WORKERS' COMPENSATION BENEFITS FOR FIREFIGHTERS WHO CONTRACT CANCER

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 39-A MRSA §328-B is enacted to read:

§ 328-B. Cancer suffered by a firefighter

Cancer suffered by a firefighter is governed by this section.

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Cancer" means a cancer affecting the skin or the central nervous, lymphatic, digestive, hematological, urinary, skeletal, oral, breast, testicular, genitourinary, liver or prostate systems or that may result from exposure to heat, radiation or a known or suspected carcinogen.

B. "Employed" means to be employed as an active duty firefighter or to be an active member of a volunteer fire association with no compensation other than injury and death benefits.

C. "Firefighter" means a municipal firefighter as defined in Title 30-A, section 3151, subsection 2 or a volunteer firefighter as defined in Title 30-A, section 3151, subsection 4.

2. Presumption. If a firefighter who contracts cancer has met the requirements of subsection 3, there is a rebuttable presumption that the firefighter contracted the disease arising out of and in the course of employment as a firefighter; that sufficient notice of the disease has been given and that the disease was not occasioned by the willful intention of the firefighter to cause the disease.

3. Required medical tests. In order to be entitled to the presumption in subsection 2, during the time of employment as a firefighter the firefighter must have undergone a standard, medically acceptable test for evidence of the cancer for which the presumption is sought or evidence of the medical conditions derived from the disease, which test failed to indicate the presence or condition of cancer. This subsection does not apply to a firefighter who is employed on the effective date of this section.

4. Liability if services performed for more than one employer. If a firefighter who contracts cancer and qualifies for the presumption under subsection 2 was employed by more than one employer, the employer of the firefighter and the insurer of that employer at the time of the last exposure to the risk of the cancer are the only persons liable under this Part.

5. Retired firefighters. This section applies to a firefighter who is diagnosed with cancer within 20 years of the firefighter's last active employment as a firefighter.

SUMMARY

This bill creates a rebuttable presumption under the Maine Workers' Compensation Act of 1992 that a firefighter who contracts cancer contracted the disease in the course of employment as a firefighter if the firefighter, during the time of that firefighter's employment, received a test for cancer that failed to detect the cancer. This bill makes the last employer for whom the firefighter worked at the time of the last exposure to the risk of cancer and that employer's insurer liable for the cancer.



Appendix D: Cancer Screening Guidelines

The most current clinical screening recommendations and guidelines (breast, cervical, prostate, and colorectal cancers) can be found through the organizations listed below:

U.S. Preventive Services Task Force

<http://www.ahrq.gov/clinic/uspstfix.htm>

American Cancer Society

<http://www.cancer.org/Healthy/FindCancerEarly/CancerScreeningGuidelines/index>

U.S. Multisociety Task Force on Colorectal Cancer

Centers for Disease Control and Prevention

<http://wwwtest.cdc.gov/cancer/dcpc/prevention/screening.htm>

National Cancer Institute

<http://www.cancer.gov/cancertopics/screening>



Appendix E: Cancer-Treating Hospitals* in Maine, by County

Androscoggin	Central Maine Medical Center, Lewiston*
Androscoggin	St. Mary's Regional Medical Center, Lewiston*
Aroostook	Aroostook Medical Center, Presque Isle
Aroostook	Cary Medical Center, Caribou
Aroostook	Houlton Regional Hospital, Houlton
Aroostook	Northern Maine Medical Center, Fort Kent
Cumberland	Bridgton Hospital, Bridgton
Cumberland	Maine Medical Center, Portland*
Cumberland	Mercy Hospital, Portland*
Cumberland	Mid Coast Hospital, Brunswick
Cumberland	Parkview Adventist Medical Center, Brunswick
Franklin	Franklin Memorial Hospital, Farmington
Hancock	Blue Hill Memorial Hospital, Blue Hill
Hancock	Maine Coast Memorial Hospital, Ellsworth
Hancock	Mount Desert Island Hospital, Bar Harbor
Kennebec	Inland Hospital, Waterville
Kennebec	MaineGeneral Medical Center, Augusta/Waterville*
Kennebec	Togus Regional VA Medical Center, Togus
Knox	Penobscot Bay Medical Center, Rockport*
Lincoln	Lincoln County Health Care, Damariscotta
Oxford	Rumford Hospital, Rumford
Oxford	Stephens Memorial Hospital, Norway*
Penobscot	Eastern Maine Medical Center, Bangor*
Penobscot	Millinocket Regional Hospital, Millinocket
Penobscot	Penobscot Nation Health Center, Indian Island
Penobscot	Penobscot Valley Hospital, Lincoln
Penobscot	St. Joseph Hospital, Bangor
Piscataquis	Mayo Regional Hospital, Dover-Foxcroft
Somerset	Redington-Fairview Hospital, Skowhegan*
Somerset	Sebasticook Valley Hospital, Pittsfield
Waldo	Waldo County General Hospital, Belfast
Washington	Calais Regional Hospital, Calais
Washington	Down East Community Hospital, Machias
York	Goodall Hospital, Sanford*
York	Southern Maine Medical Center, Biddeford*
York	York Hospital, York*

*American College of Surgeons Commission on Cancer-accredited hospitals (2010)



Appendix F: Data Sources and Data Tables

Maine Incidence Data

Maine cancer incidence data is provided by the Maine Cancer Registry, a program within the Maine Center for Disease Control and Prevention (formerly the Bureau of Health). All hospitals and healthcare facilities that diagnose or treat cancer are required by law to report their cancer cases to the Maine Cancer Registry (Title 22, Chapter 255).

National Incidence Data

National cancer incidence estimates are provided by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. SEER data are collected in specific metropolitan regions and states, representing approximately 26% of the U.S. population. Due to the predominately White population in Maine, SEER incidence rates for Whites only are often used as a more accurate comparison.

Mortality Data

Mortality data for both Maine and the U.S. are provided by the National Center for Health Statistics (NCHS). National rates for Whites only are often used as a more accurate comparison to Maine's population. Data from NCHS were calculated using a statistical software program called SEERStat.

Data Tables

Figure 1. Age-Adjusted Rates of Cancer Incidence for Maine, US, and US Whites, 1995-2007

	Maine			SEER Whites			SEER All Races		
	Male and Female			Male and female			Male and female		
	Rate	Lower CI	Upper CI	Rate	Lower CI	Upper CI	Rate	Lower CI	Upper CI
1995	476.2	464.4	488.2	481.1	478.0	484.2	475.9	473.1	478.7
1996	489.4	477.5	501.4	483.5	480.5	486.6	478.0	475.2	480.8
1997	507.7	495.8	519.9	492.0	488.9	495.1	485.0	482.2	487.8
1998	514.4	502.5	526.6	494.9	491.9	498.0	486.5	483.8	489.3
1999	505.2	493.4	517.1	496.4	493.4	499.5	488.7	486.0	491.5
2000	524.7	512.8	536.7	493.4	490.4	496.5	483.4	480.7	486.1
2001	536.7	524.8	548.8	496.5	493.5	499.5	485.7	483.0	488.4
2002	527.3	515.6	539.2	491.5	488.5	494.5	481.9	479.2	484.5
2003	521.2	509.7	533.0	477.6	474.7	480.5	467.8	465.2	470.4
2004	534.4	522.8	546.1	475.7	472.8	478.6	466.2	463.6	468.8
2005	517.7	506.4	529.3	466.0	463.1	468.8	455.5	453.0	458.1
2006	536.1	524.6	547.8	464.3	461.5	467.1	456.2	453.7	458.7
2007	515.0	503.8	526.4	468.6	465.8	471.5	461.3	458.8	463.8

Figure 2. Age-Adjusted Rates of Cancer Mortality for Maine, US, and US Whites, 1995-2006

	Maine			SEER Whites			SEER All Races		
	Male and Female			Male and female			Male and female		
	Rate	Lower CI	Upper CI	Rate	Lower CI	Upper CI	Rate	Lower CI	Upper CI
1995	227.2	219.1	235.5	206.1	205.5	206.7	209.9	209.3	210.4
1996	218.9	211.0	227.0	203.4	202.8	204.0	207.0	206.4	207.6
1997	217.5	209.8	225.5	199.9	199.4	200.5	203.6	203.0	204.1
1998	210.2	202.6	218.0	197.6	197.0	198.1	200.8	200.3	201.4
1999	214.4	206.8	222.2	197.8	197.2	198.3	200.7	200.2	201.3
2000	212.6	205.2	220.3	196.3	195.7	196.8	198.7	198.2	199.2
2001	207.9	200.6	215.5	193.6	193.0	194.1	195.9	195.4	196.4
2002	214.5	207.1	222.0	191.7	191.2	192.3	193.7	193.2	194.2
2003	205.3	198.2	212.7	188.2	187.7	188.8	190.0	189.5	190.5
2004	201.6	194.6	208.9	184.2	183.7	184.8	185.8	185.4	186.3
2005	204.7	197.7	212.0	182.7	182.2	183.2	184.0	183.5	184.5
2006	194.3	187.5	201.4	180.1	179.6	180.6	181.1	180.6	181.5

Figure 5. Maine Adults Who Are Current Smokers (1995-2009)

Year	%	CI	n
1995	25	(22.4-27.6)	312
1996	25.3	(22.9-27.7)	417
1997	22.7	(20.5-24.9)	387
1998	22.4	(20.0-24.8)	353
1999	23.3	(20.8-25.8)	372
2000	23.8	(21.6-26.0)	1019
2001	23.9	(21.9-25.9)	550
2002	23.6	(21.7-25.5)	557
2003	23.7	(21.7-25.7)	563
2004	21	(19.3-22.7)	680
2005	20.8	(19.2-22.4)	776
2006	20.9	(19.3-22.5)	770
2007	20.2	(18.8-21.6)	1292
2008	18.2	(16.9-19.5)	1108
2009	17.2	(16.1-18.4)	1238

Figure 6. Maine Adults Who Are Obese or Overweight

Year	Obese (BMI 30+)			Overweight (BMI 25.0-29.9)		
	%	CI	n	%	CI	n
1995	14.1	(11.9-16.3)	172	37.6	(34.5-40.7)	442
1996	16.1	(14.2-18.0)	274	35.8	(33.1-38.5)	567
1997	16.2	(14.2-18.2)	272	37	(34.5-39.5)	607
1998	17.4	(15.3-19.5)	279	37	(34.2-39.8)	564
1999	19.4	(17.2-21.6)	324	35.4	(32.8-38.0)	577
2000	20	(18.0-22.0)	911	36.3	(33.9-38.7)	1607
2001	19.5	(17.7-21.3)	467	39.3	(37.0-41.6)	888
2002	20.7	(18.9-22.5)	499	38	(35.8-40.2)	838
2003	19.9	(18.1-21.7)	464	38.3	(36.0-40.6)	848
2004	23.4	(21.6-25.2)	789	37.6	(35.7-39.5)	1293
2005	22.7	(21.1-24.3)	895	36.9	(35.0-38.8)	1368
2006	23.1	(21.5-24.7)	917	36.6	(34.7-38.5)	1391
2007	25.2	(23.8-26.6)	1670	37.7	(36.1-39.3)	2482
2008	25.9	(24.5-27.2)	1711	36	(34.5-37.4)	2396
2009	26.4	(25.1-27.6)	2120	37.7	(36.3-39.2)	2924

Figure 7. Maine Adults Who Report Consuming Five or More Servings of Fruits and Vegetables Per Day (1996-2009)

Year	%	CI	n
1996	26.2	(23.9-28.5)	451
1998	26.4	(24.0-28.8)	448
2000	24.5	(22.5-26.5)	1276
2002	29.4	(27.3-31.5)	726
2003	27	(25.0-29.0)	670
2005	28.7	(27.0-30.4)	1154
2007	28.6	(27.2-30.0)	2031
2009	27.9	(26.7-29.2)	2353



Figure 8. Adults with 30+ minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20+ minutes three or more days per week (2001-2009)

Year	%	CI	n
2001	50.2	(47.9-52.5)	1103
2003	53.1	(50.7-55.5)	1162
2005	54.1	(52.1-56.1)	1979
2007	56	(54.4-57.6)	3401
2009	56.2	(54.7-57.7)	4040

Figure 9. Skin Protective Practices of State-Licensed, Facility-Based Childcare Centers in Maine (2008)

	Apply Sunscreen	Encourage to wear hats	Encourage to wear sunglasses	Encourage to wear sun protective clothing	Encourage to play in shaded areas
Always	70.4%	40.3%	8.2%	11.7%	16.8%
Often	18.9%	40.8%	18.4%	26.5%	61.2%
Sometimes	7.7%	15.3%	31.1%	28.6%	18.9%
Rarely	0.5%	3.1%	28.6%	25.0%	2.0%
Never	2.0%	0.5%	13.3%	6.6%	1.0%

Figure 10. Maine Women Who Have Had a Mammogram Within the Past 2 Years (1995-2008)

Year	Women 40+			Women 50+		
	%	CI	n	%	CI	n
1995	70.3	(65.7-74.9)	324	71.9	(66.3-77.5)	223
1996	72.4	(68.5-76.3)	461	76.8	(72.5-81.1)	329
1997	74.8	(71.0-78.6)	442	77.6	(73.0-82.2)	299
1998	75.4	(71.8-79.0)	477	77.1	(72.9-81.3)	342
1999	79.5	(76.1-82.9)	488	81.8	(78.0-85.6)	351
2000	79.5	(76.3-82.7)	1451	82.9	(79.5-86.3)	1067
2002	82.2	(79.7-84.7)	823	84.7	(81.8-87.6)	577
2004	81.9	(79.8-84.0)	1254	84.7	(82.3-87.1)	919
2006	81.8	(79.8-83.8)	1523	84.3	(82.1-86.5)	1153
2008	83.3	(81.8-84.8)	2778	85.1	(83.6-86.6)	2252

Figure 11. Maine Women 18+ Who Have Had a Pap Test Within the Past 3 Years (2004-2008)

Year	%	CI	n
2004	88.8	(86.9-90.7)	1402
2006	89.1	(87.4-90.8)	1572
2008	86.3	(84.6-88.1)	2533

Figure 12. Maine Adults 50+ Who Have Ever Had a Sigmoidoscopy or Colonoscopy (1997-2008)

Year:	%	CI	n
1997	42.4	(38.3-46.5)	274
1999	42.4	(38.5-46.3)	318
2002	47.3	(44.0-50.6)	520
2004	59.2	(56.6-61.8)	1060
2006	64.2	(61.9-66.5)	1388
2008	72.6	(71.0-74.1)	3120

Figure 13: Estimated Number of Cancer Survivors in the United States (1971-2006)

Year	Number
1971	2,995,741
1972	3,134,865
1973	3,299,981
1974	3,447,010
1975	3,630,812
1976	3,805,837
1977	3,993,109
1978	4,192,377
1979	4,391,529
1980	4,576,763
1981	4,745,108
1982	4,943,233
1983	5,127,487
1984	5,320,663
1985	5,536,992
1986	5,731,770
1987	5,944,365
1988	6,168,724
1989	6,386,491
1990	6,598,821
1991	6,873,628
1992	7,193,377
1993	7,527,947
1994	7,849,228
1995	8,182,427
1996	8,412,650
1997	8,659,323
1998	8,946,912
1999	9,235,540
2000	9,555,312
2001	9,809,040
2002	10,146,324
2003	10,496,000
2004	10,762,214
2005	11,098,450
2006	11,384,892



Notes

Notes to *Introduction*

- i. Maine Cancer Registry.
- ii. Ibid.

Notes to *Burden of Cancer in Maine*

- iii. Data in this section come from the Maine Cancer Registry and the U.S. Surveillance, Epidemiology, and End Results (SEER) Program.
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- viii. Ibid.
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- xxviii. Centers for Disease Control and Prevention. Framework for Program Evaluation in Public Health, *MMWR*, 1999, 48 (RR11): 1-40.
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