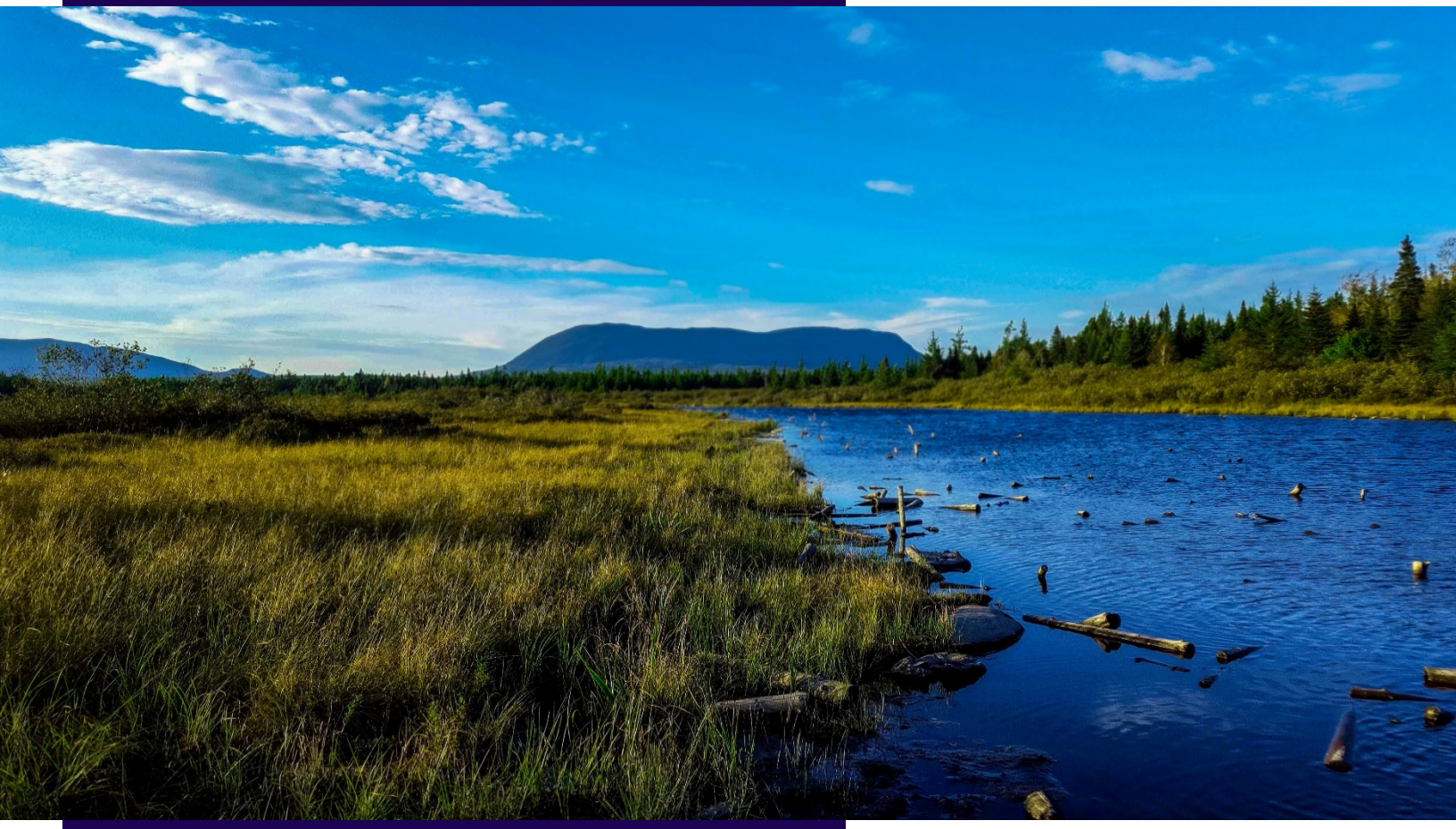
MAINE CANCER PLAN
2021-2025



MAINE'S IMPACT CANCER NETWORK

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Dear Maine Neighbors,

It is our privilege to share the Maine Cancer Plan 2021-2025, a roadmap to save lives and improve the quality of life for Maine people. Since 2010, cancer has been the leading cause of death in Maine, impacting all of us in many ways. This plan provides a framework for individuals, organizations, communities, health systems, and policy-makers to reduce the burden of cancer and its negative health, economic, and social impacts.

This year marks the 20th anniversary of Maine's first cancer plan released in 2001. Maine has made great strides in cancer control over the past two decades; cancer death rates have steadily declined, and cancer screening rates are strong. Yet, there is still much work to do, as rates of new cancer cases and cancer deaths remain higher than US rates, and more people are at higher risk of cancer through continued tobacco use, increased obesity, and exposure to ultraviolet rays.

The plan follows the cancer journey from prevention, screening, diagnosis, treatment, palliative care, through end-of-life care; it lays out goals, objectives, and sets of actions we can take that are proven to be effective. Importantly, the plan seeks to improve the lives of all Maine people and thus recognizes that the impacts of cancer are felt unevenly by our neighbors across the state. Our rural counties in eastern, western, and northern Maine have higher rates of new cancer and deaths from cancer. These areas tend to have older populations and fewer options for health care. Moreover, research shows that some populations experience greater impacts from cancer due to gender, race, ethnicity, education, income, disability, or age. At the heart of this plan is a call to action to address these inequities so we all enjoy better health.

Much has changed since the release of the first Maine Cancer Plan 20 years ago, yet the collaborative efforts of cancer stakeholders across the state remain strong. This new cancer plan was developed in that collective spirit by a group of people representing many organizations active in reducing the impacts of cancer in Maine. We extend our deep gratitude to them for the hours of work, their thoughtful input, and commitment to improving lives.

We celebrate our decades of progress and invite you all to join us as we work together to impact cancer in the years ahead.

Be well,

Nirav Shah, MD, JD
Director
Maine Center for Disease Control and Prevention

Cheryl Tucker
Executive Director
Maine Cancer Foundation

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EXECUTIVE SUMMARY

Background

The Maine Cancer Plan 2021-2025 sets out an ambitious agenda to reduce the burden of cancer on Maine's people. It has been 20 years since the Maine Cancer Consortium released the very first cancer plan for the state. Much has changed over the past two decades, but the commitment and dedication of cancer stakeholders remains strong. This new plan celebrates the decades of stakeholder efforts and sets us on a renewed path to reduce the burden of cancer in Maine.

Collective Impact

Maine's Impact Cancer Network, working in partnership with the Maine Center for Disease Control and Prevention's Comprehensive Cancer Program, served as the primary stakeholder group providing staffing, input, and guidance on the plan. Twelve teams and workgroups contributed to the plan and many stakeholders provided input and review. They developed the plan using a collective impact approach, knowing that shared goals and a united plan of action is needed to achieve meaningful results.

Cancer in Maine

Cancer is a complex disease with many causes and complex treatments. In Maine, it is the leading cause of death, responsible for 22 percent of all deaths in 2018. Each year more than 9,000 adults are newly diagnosed with cancer and more than 3,000 die from the disease. Maine's cancer rates for certain cancers are higher than the US rates though for many cancers rates are decreasing. The good news is that every year, Maine has more cancer survivors and many people are taking steps to prevent or find cancer early. Cancer has far-reaching health, economic, social, and emotional impacts, placing a great burden on Maine people.

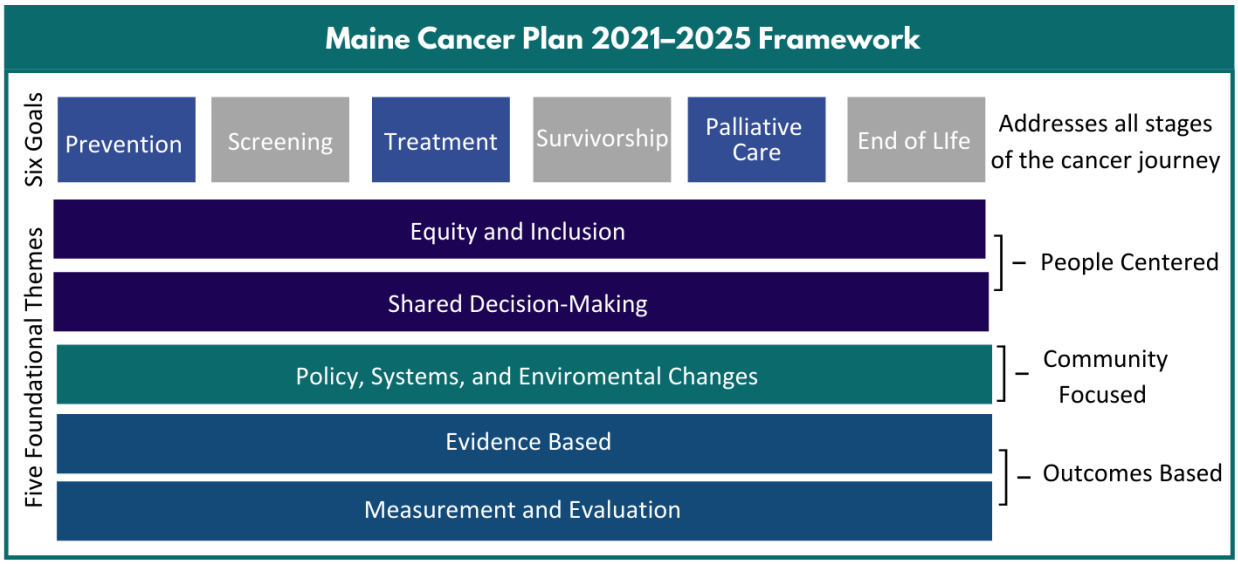
The Plan Framework

The Maine Cancer Plan 2021-2025 has six goals that span the cancer journey from prevention and screening through survivorship and end-of-life care. Each goal has objectives and measures for tracking progress and a set of strategies to guide actions to reduce cancer's impact.

Six Goals

1. Prevention – Reduce cancer risk through evidence-based strategies
2. Screening – Increase evidence-based screenings
3. Treatment – Increase timely, high-quality, and evidence-based cancer treatment
4. Survivorship – Improve the quality of life for cancer survivors
5. Palliative Care – Ensure all patients have comprehensive, high-quality palliative care throughout their cancer diagnosis and treatment
6. End-of-Life Care – Ensure timely, high quality end-of-life support for cancer patients

The plan has five foundational themes that support all the goals, objectives, and strategies. The first two themes – Equity and Inclusion and Shared Decision-Making – put people first by addressing inequities in our communities and empowering people to share in the decisions made about their health care. The third unifying theme – Policy, Systems, and Environmental Change – emphasizes the need to work at a community or population level to impact the most people and make lasting changes. The fourth and fifth themes – Evidence Based and Measurement and Evaluation – will ensure that all strategies are outcomes based and monitored for continuous improvement.



Measurement and Reporting

The Maine Comprehensive Cancer Control Program team will track progress on the plan measures and provide updates as data become available. Maine's Impact Cancer Network will share the updates to its stakeholders and public audiences.

How to use the Plan

Anyone interested in making a difference to prevent, control, and provide care for cancer can use the plan to guide their actions. Individuals can use the plan to learn more about steps to take for prevention and early detection of cancer, treatment, and survivorship. Health-care providers can learn more about the importance of holding discussions with their patients about their preferences for screening, treatments, and services. Policy makers can use the plan to understand priorities and the need to build capacity for palliative and hospice care services for all people. Stakeholders can see how their goals align with others to make a collective impact on cancer. Working together, we can make a big difference in reducing the burden of cancer in Maine.

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INTRODUCTION

Cancer in Maine

The Maine Cancer Plan 2021-2025 is an important roadmap for anyone interested in reducing the impact of cancer in Maine. Cancer is a complicated disease that has many causes and complex treatments. While each year we learn more about cancer prevention and control, it continues to affect all of us in many ways. We either know people who have had cancer, or we've been cancer patients or caregivers ourselves. In fact, cancer has far-reaching economic, health, social, and emotional impacts. This plan is a call to action for all of us to work together to save lives, reduce suffering, and improve health.

Long History of Stakeholder Participation

With the release of the Maine Cancer Plan 2021-2025, we celebrate 20 years of stakeholder work to reduce the burden of cancer in the state. This plan builds on a strong foundation of work that began in 1999 by the Maine Cancer Consortium, a partnership of cancer partners and stakeholders focused on the common goal of reducing cancer in the state. At that time, the group undertook a two-year planning process to develop Maine's first cancer plan which they released in 2001. The 2021-2025 plan celebrates the progress made, and lessons learned over the last 20 years.

Maine's Impact Cancer Network

We know that no single partner nor program can have a big impact cancer on its own. By working together and focusing efforts on a few key priorities and shared goals, partners can make the biggest difference. In 2015, after the original consortium merged with the Maine Cancer Foundation, they reconvened cancer stakeholders to strengthen the network and identify a set of common goals. As a result of these efforts, the stakeholders established Maine's Impact Cancer Network. Today this network has more than 500 members from non-profit organizations, the business community, government agencies, and people with lived experience actively engaged in impacting cancer across Maine.[1]

Maine's Impact Cancer Network is guided by a Leadership Roundtable and supported by the Maine Cancer Foundation with funding, resources, and staffing. The network uses a collective impact approach to bring partners together to develop a common agenda, focus resources, share knowledge, and make improvements to reduce cancer's impact. See Figure 1.

[1] Maine's Impact Cancer Network has conducted extensive outreach with stakeholders to seek input on the most pressing issues and promising practices that impact cancer. The work was published in the Listening Report May 2017 and Community Plan January 2018. See Reference section for links.

Figure 1. Five Components for the Successful Collective Impact Initiative from The Community Tool Box

Common Agenda – All participants share a vision for change that includes a common understanding of the problem and a joint approach to solving the problem through agreed-upon actions.

Shared Measurement – All participating organizations agree on the ways success will be measured and reported, with a short list of common indicators identified and used for learning and improvement.

Mutually Reinforcing Activities – A diverse set of stakeholders, typically across sectors, coordinate a set of differentiated activities through a mutually reinforcing plan of action.

Continuous Communication – All players engage in frequent and structured open communication to build trust, assure mutual objectives, and create common motivation.

Backbone Support – An independent, funded staff dedicated to the initiative provides ongoing support by guiding the initiative's vision and strategy, supporting aligned activities, establishing shared measurement practices, building public will, advancing policy, and mobilizing resources.

Sources:

- University of Kansas Center for Community Health and Development, Community Tool Box Chapter Two:
- Section 5 – Collective Impact
  Kania, J. & Kramer, M. (Winter 2011). Sanford Social Innovation Review. Collective Impact

Comprehensive Cancer Control Framework

The US Centers for Disease Control and Prevention (US CDC) describes comprehensive cancer control as an integrated and coordinated approach to reduce the incidence, morbidity, and mortality of cancer through prevention, early detection, treatment, rehabilitation, survivorship, and palliation. Since 1998, the US CDC's National Comprehensive Cancer Control Program has provided funding, guidance, and technical assistance to state health departments to design and implement sustainable work to prevent and control cancer. Maine's program tasked with developing the state cancer plan is the Maine Comprehensive Cancer Control Program, a program of the Maine Center for Disease Control and Prevention (Maine CDC).

The Maine Comprehensive Cancer Control Program collaborates with many partners statewide to promote healthy behaviors, improve access to cancer care including treatment and palliative care, and reduce disparities among groups disproportionately impacted by cancer. Over the years, the program has relied on coalitions and consortiums to provide much-needed stakeholder input in its comprehensive planning processes. Maine's Impact Cancer Network, the cancer coalition for the state, began the collaborative work of developing the 5th edition of the Maine Cancer Plan 2021-2025.

Cancer Plan Committees

More than 75 cancer stakeholders representing medical staff, non-profit organizations, the business community, people with lived experience, and government agencies from across Maine offered their expertise and assistance in creating the plan. For over a year, stakeholders met to discuss the plan content and how it may be used to support cancer work across the state. The work began in the summer of 2019 in visioning sessions with Maine's leading cancer experts. These sessions established the overall goals and priorities for the plan. As a result of the goal setting, committees and teams formed to carry out detailed planning for each of the goal areas. An Executive Committee served as an oversight group and guided all aspects of the plan development. Staff from Maine Cancer Foundation and the Maine Comprehensive Cancer Control Program provided administrative and financial support for the work.

Twelve committees and teams contributed to the plan. See Figure 2 for a complete list. The Data Team used high quality data sources for measurement of the goals and objectives. In addition to the Data Team, ten subject matter teams drafted the plan's specific goals, objectives, and strategies. The Prevention Team created sub-teams to address tobacco, obesity, radon, arsenic, HPV, and ultraviolet radiation.

Figure 2. Twelve Teams and Workgroups Contributed to the Plan

Committee members shared their personal knowledge and expertise throughout all stages of the work. They discussed and debated a variety of ways to reduce the burden of cancer in Maine, and in some cases, they held differing opinions on which ones would have the most impact. After hours of research, review, and discussion, the committees used a consensus approach to agree on priority goals, objectives, and strategies.

The final step in the planning included outreach to Maine's Impact Cancer Network's long list of more than 500 stakeholders, as well as the public, seeking input on the goals, objectives, and strategies. Their review refined as well as validated the yearlong work.

The work invested in creating the Maine Cancer Plan 2021–2025 demonstrates the deep culture of collaboration among colleagues and stakeholders to reduce the burden of cancer in our state. We are grateful for all the people who volunteered countless hours to create this important plan. Working together, we will impact cancer in Maine.

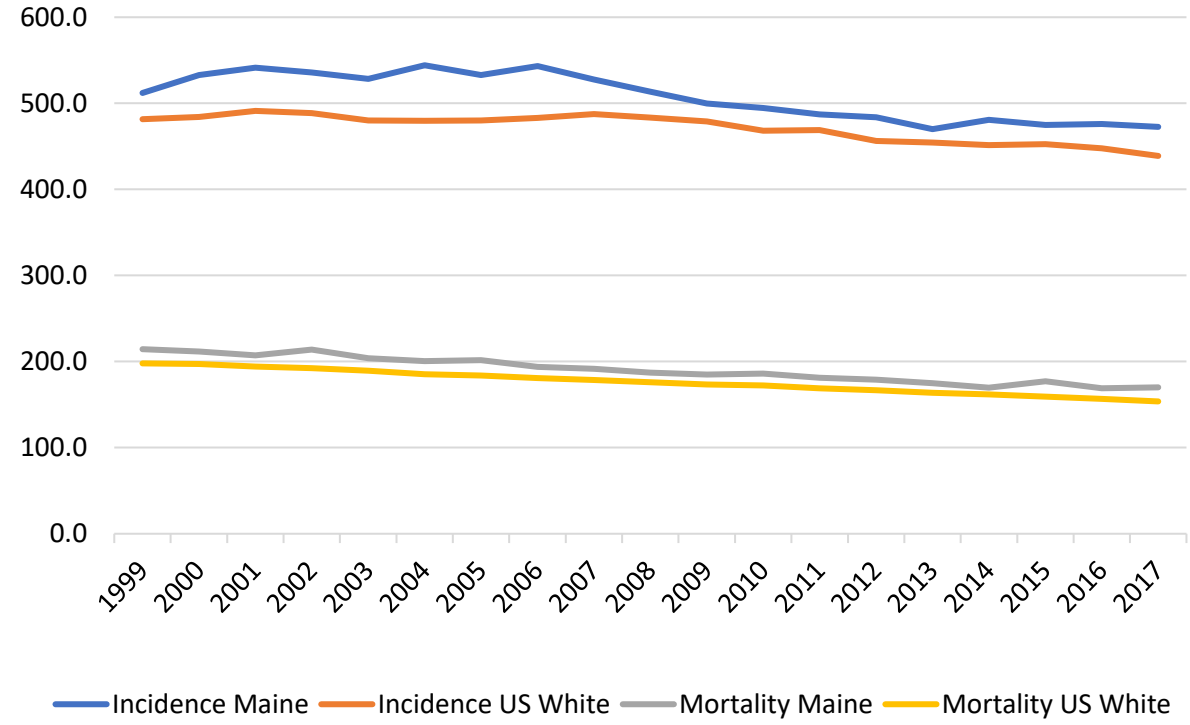
BURDEN OF CANCER IN MAINE

Too Many Lives Lost

Cancer is the leading cause of death in Maine. In 2018, cancer was responsible for 22 percent of all deaths with 3,273 lives lost in the state. Overall, the rate of cancer deaths per 100,000 population was 162.0 in 2018, higher than the US White rate of 149.1. Since 1993, the state has seen a 1.9 percent decline per year in cancer mortality. However, some regions have higher rates of deaths from cancer including Piscataquis, Somerset, and Washington counties.[2]

Like the US experience, cancer deaths are higher among men than women in the state. There are five cancer types that contribute to the most deaths for men and women combined – lung, colon and rectum, female breast, prostate, and pancreas cancers.[3] Maine's death rate from lung cancer exceeds the US White rate.[4] See Figure 3.

Figure 3. All Cancers Incidence and Deaths, Maine and US White, 1999-2017



[2] *Maine Leading Causes of Death: Ten Most Common Causes 2018*. Augusta, ME: Maine Center for Disease Control and Prevention; 2019.
[3] *The Maine 2020 Annual Report of Cancer*. Augusta, ME: Maine Center for Disease Control and Prevention; 2021.
[4] Maine's population is predominately White, so analysts compare state cancer data with US White data.

Cancer Rates in Maine

Overall, Maine has higher incidence rates of some cancers than the US, with 472.6 per 100,000 population in 2017 compared to the US White rate of 438.9. The cancer types with the highest rates of incidence in Maine for males and females combined include lung, colon and rectum, female breast, prostate, and urinary bladder,[5] with lung, and urinary bladder cancers exceeding the US White rates. The top five types of new cancer cases represent 53 percent of all cancer incidence in Maine. Similarly, the top five types of cancer related death in Maine for males and females combined account for 52 percent of all cancer morbidity in Maine. See Figures 4 and 5.

Figure 4. Top Five Types of New Cases of Cancer in Maine, 2017

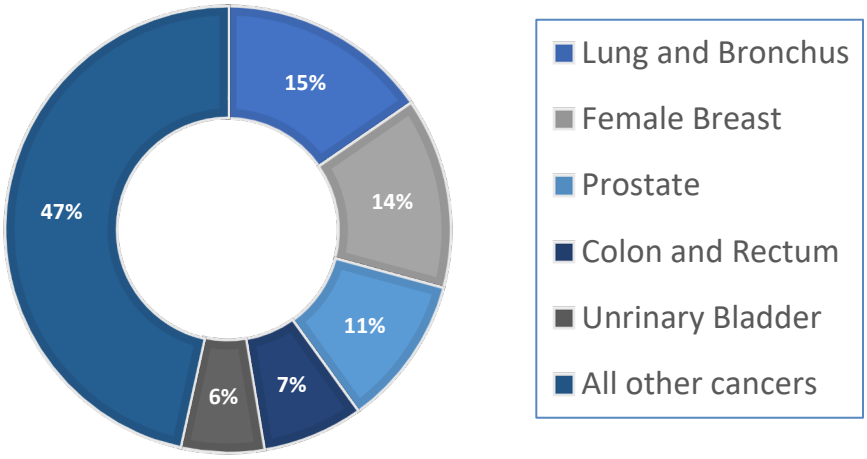
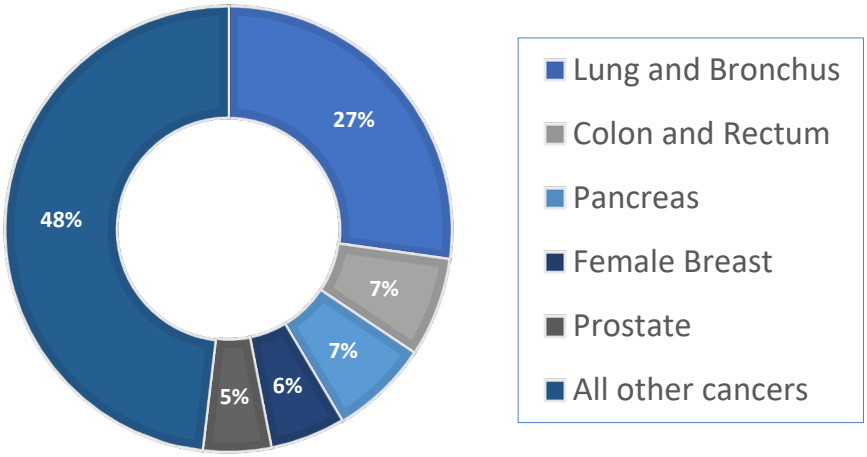


Figure 5. Top Five Types of Cancer Deaths in Maine, 2017



[5] Tobacco-related cancers, excluding lung cancer, are a group of 11 site-specific cancers for which tobacco use has a direct causal link and are a significant contributor to overall cancer incidence in Maine adults.

Risks for Cancer

Cancer is a complex disease with many causes and risk factors – some risks are not possible to prevent, while other risks can be reduced by adopting healthier routines or removing harmful chemicals. Some behaviors that lead to higher risk of cancer include tobacco use, alcohol use, obesity, and over exposure to ultraviolet rays. Other risks are environmental including radon gas in our homes and arsenic and radon in our drinking water. There are tests to detect these elements so that we can take action to reduce their harmful effects.

Factors that Influence Health

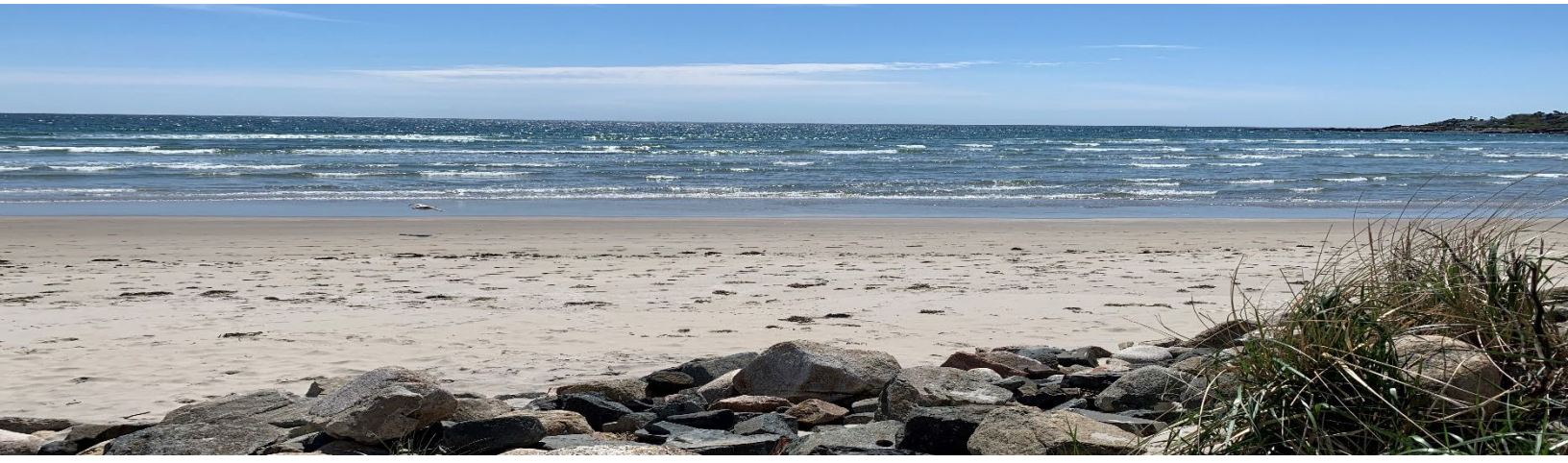
There are many factors that influence health, healthy behaviors, and risks for developing diseases such as cancer. These factors include age, income, education, race, and region. For example, the risk of prostate cancer increases with age and the risk of skin cancer is higher for Whites. Lower education levels and income may lower ability to pay for care or make it harder to access health insurance. Rural states, like Maine, struggle to provide cancer services to less populated areas, forcing many patients to drive long distances for care.

Compared to the US, Maine's people are older, are mostly White, and have lower incomes increasing risks for some cancers, education attainment is comparable. See Table 1.

Table 1. Demographics that Influence Health Status, Maine Compared to US

Region	Over 65 years of age	White	Median Household Income	Bachelor's Degree
Maine	21.2%	94.4%	$50,826	20.0%
US	16.5.%	76.3%	$57,617	19.8%

Sources:
Age data are from the American Community Survey, 2019.
All other data are from the American Community Survey, 2012 – 2016, 5-Year Estimates.



THE PLAN

The Maine Cancer Plan 2021-2025 serves as a common guide for all cancer stakeholders in the state. The document shares the current data available on the burden of cancer in Maine and lays out the goals, objectives, and strategies for action to reduce the burden. There are strategies for individuals who have been directly affected by cancer, community-based organizations, clinicians, and any person who is interested in making a difference.

The plan is comprehensive and yet does not include every possible strategy for reducing cancer's impacts. Rather, the plan includes those strategies embraced by our stakeholders in the state. At the heart of the plan is a need to address the inequities experienced by Maine people due to race, gender, income, education, or region. By giving attention to those most impacted, we can reduce the burden for everyone in Maine.

Goals

The goals of the Maine Cancer Plan 2021-2025 span all stages of care from promoting the healthy behaviors that can prevent cancer, reducing poor health outcomes for survivors, and increasing the use of end-of-life care in Maine.

Six Goals

1. Prevention – Reduce cancer risk through evidence-based strategies
2. Screening – Increase evidence-based screenings
3. Treatment – Increase timely, high-quality, and evidence-based cancer treatment
4. Survivorship – Improve the quality of life for cancer survivors
5. Palliative Care – Ensure all patients have comprehensive, high-quality palliative care throughout their cancer diagnosis and treatment
6. End-of-Life Care – Ensure timely, high quality end-of-life support for cancer patients

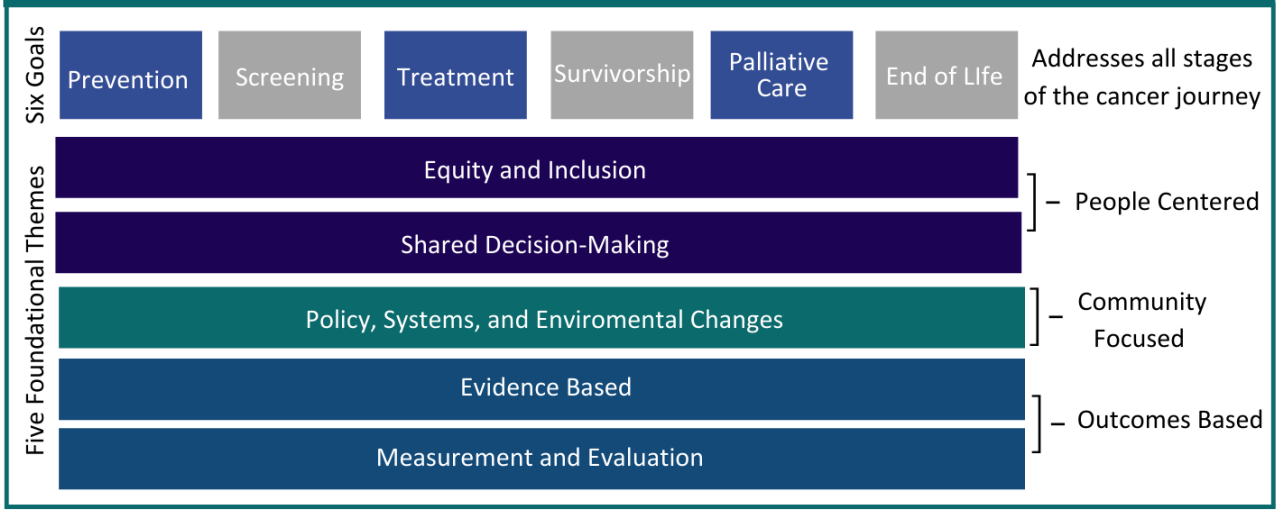
Each goal has three parts, a goal statement, objectives, and a corresponding set of strategies. The goal guides the work in influencing cancer prevention, detection, treatment, and care. The objectives are specific measures with a baseline and 5-year target. For most objectives, the plan calls for 10 percent improvement over the planning timeframe. The 10 percent change balances a desire for real improvements with the reality that changing behaviors and the course of disease is difficult.[6] The data team will work with the subject matter teams to monitor the objectives and measures as they learn more about the impact of COVID-19 and other influences on the data. The strategies include evidence-based programs and practices that are known to improve health and reduce risks of cancer.

[6] For more information on target setting see Healthy People 2030 website discussion at: https://health.gov/healthypeople/objectives-and-data/data-sources-and-methods/target-setting-methods

Five Themes Support the Goals

Maine Cancer Plan 2021-2025 has five foundational themes that support all the goals, objectives, and strategies. See Figure 6. The first two themes – Equity and Inclusion and Shared Decision-Making – put people first by addressing inequities and empowering people to share in the decisions made about their health care. The third unifying theme – Policy, Systems, and Environmental Change – emphasizes the need to work at a community or population level to impact the most people and make lasting changes. The fourth and fifth themes – Evidence Based and Measurement and Evaluation – will ensure that all strategies are outcomes based and monitored for continuous improvement.

Figure 6. Maine Cancer Plan 2021-2025 Framework



Health Equity and Inclusion

The plan calls for all strategies and actions to have a health equity and inclusion focus. There are two terms that are used to describe differences in health status among groups: health disparities and health inequities. Health disparities may occur when looking at differences in health outcomes across groups of people. The differences may be due to physical conditions such as age or unjust circumstances influenced by socioeconomic status or race. Health inequities are differences in health outcomes that are systematic, avoidable, and unjust.[7] Differences in health status are often due to differences in gender, race, ethnicity, education, income, disability, or region.[8] In Maine specifically, a 2019 study on the underlying determinants of health made the following statement. "Dramatic differences in health exist across the state that are not due to genetics and individual behavior but are due to social disadvantage."[9] When we implement strategies that reduce disadvantages and improve access to services for people who are experiencing inequities, we improve health for all.

[7] http://www.ihi.org/communities/blogs/making-sense-of-health-equity-terminology
[8] https://www.cancer.gov/about-nci/organization/crchd/about-health-disparities/definitions
[9] Pizzonia C, Lichter EL, Teach F, Birkhimer N, Morian-Lozano E. The Way Health Should Be: Social Determinants of Health in Maine 2019. Augusta, Maine: Maine Center for Disease Control and Prevention.

Shared Decision-Making

Within all the clinical goals and strategies, the plan promotes the need for people to work with their medical providers to make the best decisions for their own health and quality of life. This approach, called shared decision-making, encourages people to discuss the benefits and risks for any cancer prevention, screening, and treatment option. Clinicians are the experts on the disease and the treatments while the patients are the experts in how the disease may impact their lives.

Shared decision-making gives the patient the opportunity to share their experiences, concerns, and long-term plans with providers, so they make decisions that offer the most benefit. In some cases, decisions are clear, and patients and providers are confident in following the course of action. Other times, there are several options and the full range of benefits and risks need to be reviewed and considered before a patient makes a final decision about a course of action. Shared decision-making creates opportunity for people to make decisions based on clinical input and personal preferences.

Policy, Systems, and Environmental Changes

This plan includes many strategies that are policy, systems, or environmental changes because of their potential to have great impact in cancer control and prevention. Making changes to a patient's care is important for individual health, but making policy, systems, or environmental changes can lead to lasting improvements and reach many more people. Policy, systems, and environmental changes remove barriers and create healthier options for many people, in many settings.

There are many ways to make policy, systems, and environmental changes. Lawmakers can make changes to state policies that increase health insurance coverage for cancer screening, treatment, and other services reducing cost barriers to many. They can also pass legislation to strengthen existing radon detection and control requirements along with funding needed for repairs to buildings. Health-care systems with large numbers of patients can improve systems of care to increase access to cancer prevention, patient screening, early detection, treatment, and post treatment care. Businesses can make changes to their environment such as removing tobacco product messaging or increasing access to healthy foods. Employers can create policies that give employees paid time off for cancer screening appointments. Communities and local governments can improve the safety of their sidewalks and streets so that they promote walking and physical activity.

Evidence-Based Strategies

With a focus on having the most impact, the plan stakeholders agreed that all recommended objectives and strategies should be based on scientific evidence. The objectives and strategies for each goal in this plan are evidence-based, meaning researchers have proven that they are effective in achieving positive impacts. Stakeholders further refined the strategies by sharing their knowledge of what works best in Maine. In addition, the plan relies on the cancer care clinical guidelines developed by medical boards and supported by the National Comprehensive Cancer Control Program. However, we do recognize that there are several sets of national guidelines used by health professionals and caregivers that have overlapping recommendations on cancer prevention and care.

Outcomes: Measurement and Evaluation

The plan has Specific, Measurable, Actionable, Realistic, and Timebound (SMART) objectives that will be tracked and reported as data become available. The Data Team and subject matter teams selected baseline measures and targets for each objective using the best available data sources. In the cases where no data were available, the plan has action steps to find suitable tracking measures. The subject matter teams set targets for a 10 percent improvement over the 5-year plan. As new data emerge or if the method for collecting data changes, the plan will be revised to reflect the changes.

Reporting

The Maine CDC's Comprehensive Cancer Control Program team will track the data sources and measures included in the plan and will update the Performance Measures table (page 39). Maine's Impact Cancer Network will share new data as it becomes available by including it in its newsletters and communication to members.

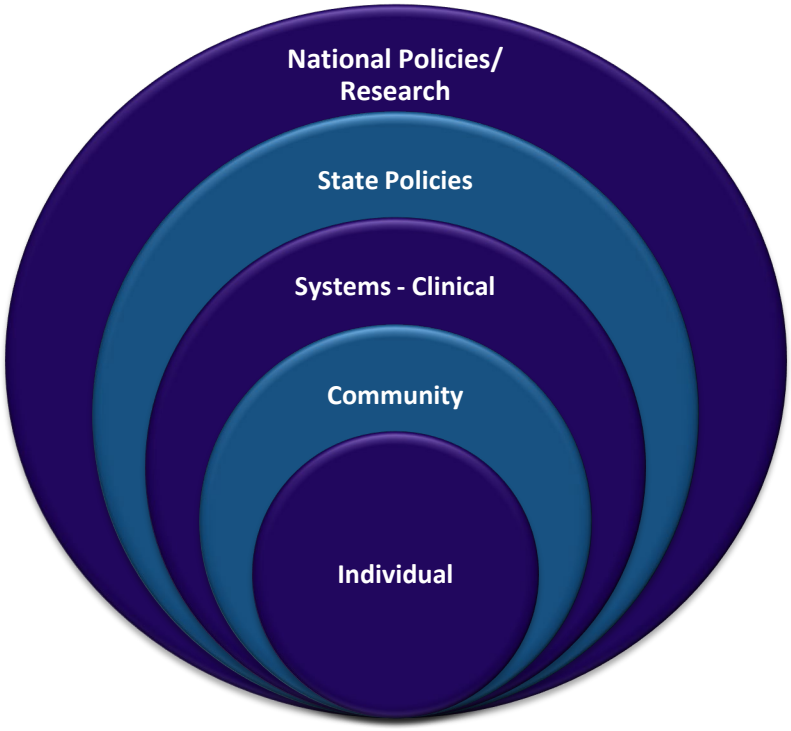
HOW TO USE THE PLAN

The Maine Cancer Plan 2021-2025 has many uses for a variety of audiences. At the highest levels, it provides lawmakers and opinion leaders information about the burden of cancer in our state and outlines key strategies to reduce that impact. For health-care systems and clinicians, it provides benchmarks and targets to monitor progress. Community health coalitions can use the plan to inform their work at the local level and show how their collective efforts impact cancer across the state. On a personal level, people with cancer and their loved ones can use the plan to advocate for their own care, for insurance coverage, and for access to services from screening and diagnosis through all stages of survivorship. Within the plan, there are specific strategies for individuals, families, schools, workplaces, communities, health-care providers, health-care practices, health systems, policy makers, and others.

Advocacy

This plan is a call to action for anyone who is working to reduce the burden of cancer in Maine for individuals, communities, and the state. See Figure 7.

Figure 7. Maine Levels of Engagement and Advocacy[10]



[10] Inspired by the Social Ecologic Model https://www.cdc.gov/violenceprevention/publichealthissue/social-ecologicalmodel.html

Many people are active in the cancer community, advocating for themselves, their loved ones, or about specific forms of cancer prevention and control. There are many ways to be involved in impacting cancer and the most effective strategies come from efforts to change policies, practices, systems, and laws. Some advocates promote healthy living and early detection to avoid late diagnoses and poor outcomes. Other advocates seek out services for screening, for access to services, for transportation, for meals and other supports for cancer survivors. Many people advocate for changes to policies or laws to reduce environmental hazards, increase health insurance coverage, improve care, and protect jobs while seeking and receiving treatment. In addition to direct advocacy, many raise funds and conduct outreach to support research for curative therapies and preventive vaccines. There are advocates for new drugs, clinical trials, and payments for experimental treatments. This plan unites the work of all types of advocates, showing the collective impact of those efforts.

Best-Laid Plans and COVID-19

COVID-19 surprised all of us in early 2020, causing unprecedented health and economic crises in the US and Maine. In December 2019, scientists identified a new coronavirus, SARS-CoV-2 that caused a worldwide pandemic of respiratory illness, named COVID-19. COVID stands for "coronavirus disease" and 19 is the year doctors discovered the disease. Every day, scientists and analysts are learning and sharing more information about the virus and how it spreads, and the data keep changing. In less than one year, COVID-19 has become one of the leading causes of death in the US along with heart disease and cancer.[11] For patients with cancer and survivors, the risks of contracting the virus are worrisome, the fatality rate is 13 percent, compared to 3 percent for the general patient population.[12] In response to COVID-19 stay-at-home advisory, cancer care providers had to change therapies, delay treatments, and suspend services. People with cancer, like many, lost jobs, income, or health insurance putting them at further risk for losing treatment services. As with other diseases, the virus has infected and killed people of color, Native Americans, people with lower incomes, and those living in congregate settings at far higher rates than other populations.

Every part of our lives changed to protect the public from the virus and to recover from the economic fallout of the mandatory shutdowns and precautions. COVID-19 impacted many aspects of cancer care, control, and prevention. In the earliest days of the stay-at-home orders from March to the end of April, health-care services were limited to non-elective procedures only and all routine physicals, screenings, and consultations were put on hold. Since the reopening, health-care providers are still catching up with the backlog and people are wondering if it is safe enough for them to enter a health-care facility. Data for the US reported by the National Institute for Health Care Management show the following for March through May 2020:

[11] Zhou Y, Stix G, COVID-19 is Now the Third Leading Cause of Death in the US, Scientific American, October 8, 2020.
[12] NIHCM Foundation Newsletter, COVID-19 & Chronic Disease, November 2020.
https://nihcm.org/newsletter/covid-19-chronic-diseases

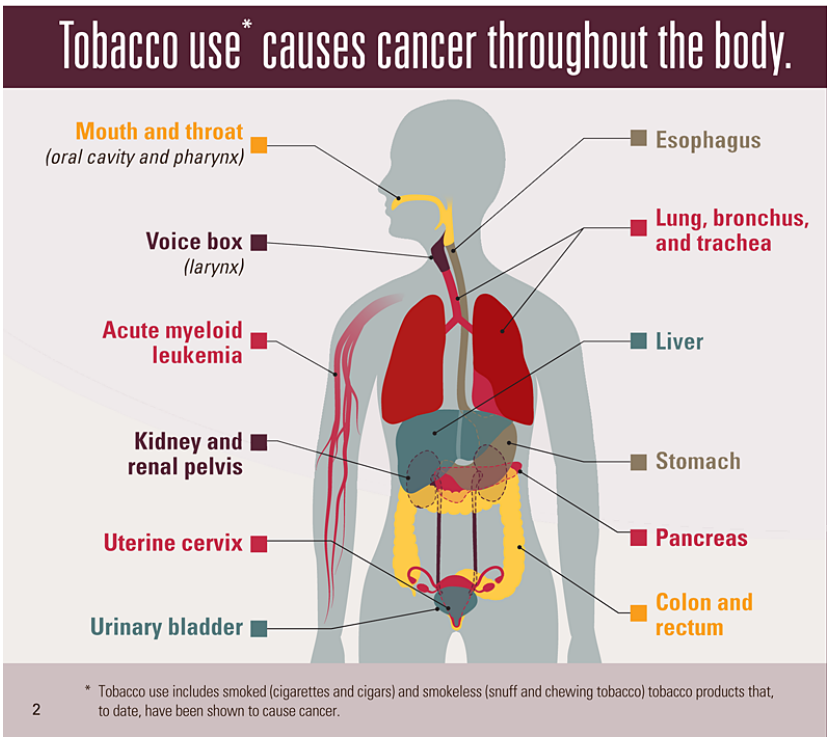
- Advanced cancer: 18 percent of newly diagnosed breast-cancer patients had an advance stage of the disease
- Breast cancer patient's surgeries were delayed which could lead to an increase in deaths from cancer
- Cancer research was delayed, only 20 percent of clinical trials are recruiting patients at previous rates

The Maine Cancer Plan 2021-2015 recognizes the real and potential impacts of COVID-19 on cancer care, control, and prevention. The reporting of outcome data will play a critical role in understanding the impacts and pinpoint priority areas for action.

GOAL 1: PREVENTION – REDUCE CANCER RISK THROUGH EVIDENCE-BASED STRATEGIES

The good news is that we can prevent many forms of cancer by making healthy choices. Using tobacco or drinking alcohol increases the risks for cancer, while healthy eating, physical activity, and maintaining a healthy weight reduces the risks. Applying sunscreen and wearing sunglasses are also simple steps to block dangerous ultraviolet rays that cause cancer. Changing routines can be hard, so it is important to start early and help children develop good choices right from the start. It is also easier for all of us to make good choices when we have healthy options where we live, study, work, and play. In addition to making these healthy choices, we can make sure our homes are healthy by checking for radon gas in the home and arsenic and radon in well water. The objectives and strategies for the prevention goal address the highest risk factors for developing cancer and share evidence-based strategies that promote healthy behaviors and actions.

Tobacco Use



Smoking is the world's leading preventable cause of death.[13] Tobacco is known to cause 11 different cancers and is responsible for 40 percent of all cancers diagnosed in the US.[14] Not only does smoking harm the person who smokes, but exposure to secondhand smoke can increase the risk for heart attack or stroke in nonsmokers. According to the US Surgeon General, there is no safe level of exposure to tobacco smoke, and smoking can cause cancer almost anywhere in the body. In fact, if no one in the US smoked, it would prevent one out of three cancer deaths.[15] Smokeless tobacco, including chewing tobacco and snuff, can cause cancers in the mouth as well as in the esophagus and pancreas.

[13] https://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm#:~:text=Smoking%20is%20the%20leading%20cause,7%20million%20deaths%20per%20year.&text=If%20the%20pattern%20of%20smoking,to%20tobacco%20use%20by%202030

[14] https://www.cdc.gov/media/releases/2016/p1110-vital-signs-cancer-tobacco.html

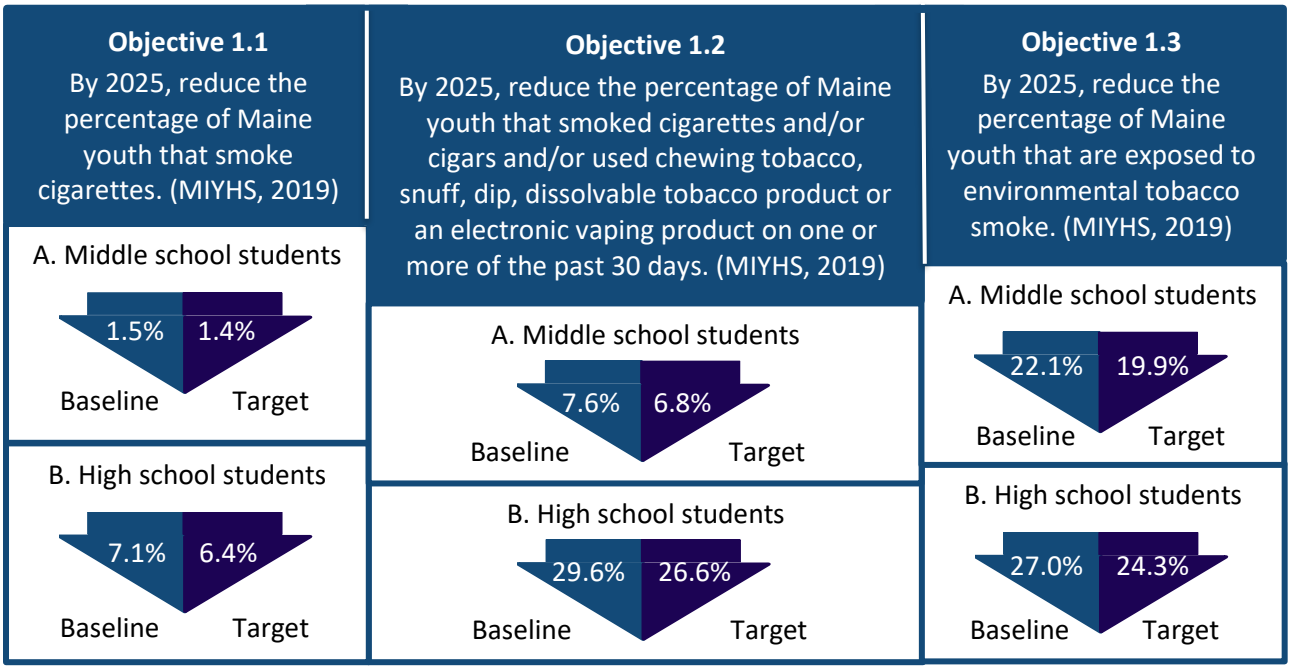
[15] https://www.hhs.gov/sites/default/files/consequences-smoking-consumer-guide.pdf

Researchers are still learning about how using e-cigarettes, also called vaping, affect health when used for long periods of time. The aerosol or vapor from an e-cigarette contains some cancer-causing chemicals, although in significantly lower amounts than in cigarette smoke. Most e-cigarettes include nicotine, which is harmful to the developing brain, and youth who use e-cigarettes are more likely to use combustible cigarettes.[16]

Studies show that if we can prevent youth from using tobacco products, it is unlikely they will ever start. We will continue to support policies and programs aimed at preventing youth and young adults from starting to use tobacco, helping people quit using tobacco, and reducing exposure to secondhand smoke. Nicotine, a substance in tobacco, is so addictive that nearly 70 percent of current smokers want to quit, but say it is hard. It may take many tries to be successful, but each quit attempt is helpful practice in quitting for good.

We know that some populations have higher rates of tobacco use, putting them at greater risk for cancer. Tobacco advertising targets vulnerable groups that are more likely to use and become addicted to tobacco. It is important to focus prevention efforts on those groups who are at the highest risk for using tobacco.

Youth Tobacco Use Objectives

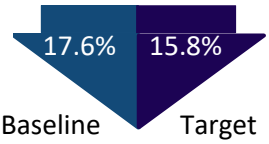
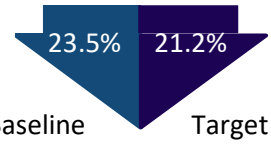
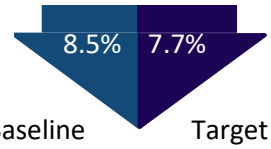


[16]Barrington-Trimis J, Yang Z, Schiff S, Unger J, Cruz T, Urman R, Cho J, Samet J, Leventhal A, Berhane K, McConnell R. E-cigarette Product Characteristics and Subsequent Frequency of Cigarette Smoking
Pediatrics May 2020, 145 (5) e20191652; DOI: 10.1542/peds.2019-1652

Youth Tobacco Use Strategies

- Promote tobacco retailer participation in the NO BUTS! Training to prevent youth tobacco sales
- Implement policy and environmental changes in communities and at the state level to discourage use of tobacco products (e.g. worksites, hospitals, colleges, municipalities, K-12 schools, etc.)
- Assist youth who are using tobacco in getting help with quitting using the Maine QuitLink, This Is Quitting, and 1-800-QUIT-NOW
- Conduct statewide youth targeted mass-media counter marketing campaigns
- Increase taxes on cigarettes and other tobacco products
- Assist health-care organizations serving populations with high smoking rates, such as federally qualified health centers, behavioral health-care facilities, and substance abuse treatment facilities, to integrate tobacco dependence treatment into electronic health records and other routine health-care delivery
- Support enforcement of the Tobacco 21 law and efforts to reduce tobacco sales to underage youth through retail tobacco inspection

Adult Tobacco Use Objectives

Objective 1.4 By 2025, reduce the percentage of Maine adults that smoke cigarettes. (BRFSS, 2019)	**Objective 1.5** By 2025, reduce the percentage of Maine adults that report currently using any tobacco products (cigarettes, smokeless tobacco, e-cigarettes, or other tobacco products). (BRFSS, 2015)	**Objective 1.6** By 2025, reduce the percentage of Maine adults that indicate that someone (including themselves) had smoked cigarettes, cigars, or pipes anywhere inside their home in the past 30 days. (BRFSS, 2017)
		

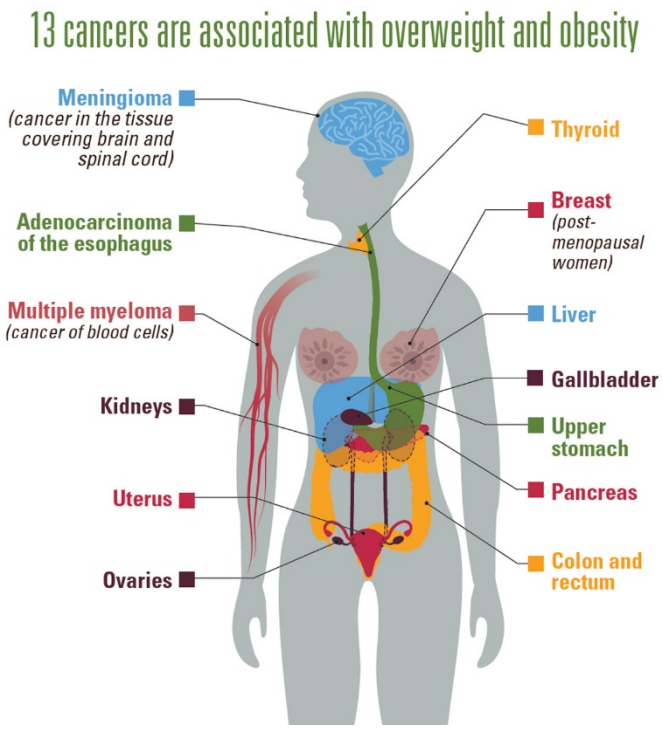
Adult Tobacco Use Strategies

- Assist adults using tobacco to find help with quitting using the Maine QuitLink, and 1-800-QUIT-NOW
- Implement policies prohibiting tobacco use in multiunit housing and rental properties, hospitals, and behavioral health settings
- Enforce state tobacco law prohibiting tobacco use in the workplace (including in company vehicles, and outdoor spaces while on the job)
- Assist health-care organizations serving populations with high smoking rates, such as federally qualified health centers, behavioral health-care facilities, and substance abuse treatment facilities, to integrate tobacco dependence treatment into electronic health records and other routine health care delivery

Obesity Prevention

In 2013, the American Medical Association officially recognized obesity as a chronic disease. As a disease, practitioners use "People First Language" to address their patients who have a disease (e.g., as "person with a disease"), rather than labeling the individual by his or her condition. By using "People First Language" health professionals can treat patients that have obesity with the same respect and dignity as patients with other diseases such as diabetes and cancer.

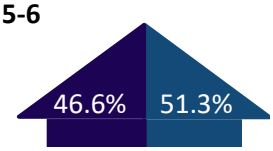
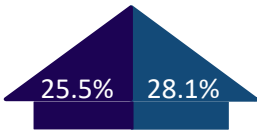
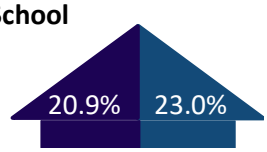
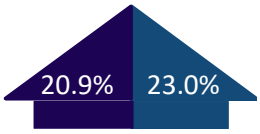
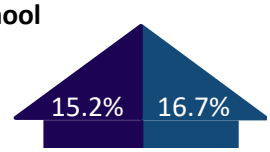
In the US, one in three Americans has obesity, a leading risk factor for certain cancers. There are at least 13 different types of cancer related to obesity including colorectal, esophageal, and uterine.[17] For men and women combined, colorectal cancer is the fourth most diagnosed cancer, and the second leading cause of cancer-related death in Maine. Esophageal and uterine cancer rates are also significantly higher in Maine than the rest of the US. With 30.4 percent of Maine adults having obesity and 65.7 percent of Maine adults having obesity or carry too much weight, the number of people diagnosed with these cancers are likely to rise. Healthy eating and active living are two ways people can reach and maintain a healthy weight.



[17] https://www.cdc.gov/media/releases/2017/p1003-vs-cancer-obesity.html

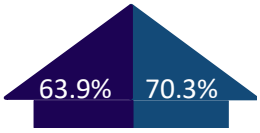
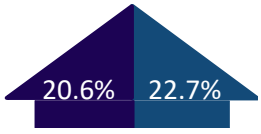
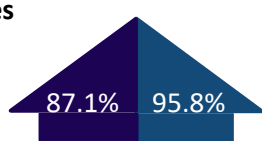
Youth Healthy Eating Active Living Objectives

Objective 1.7
By 2025, increase healthy eating and physical activity among Maine youth. (MIYHS, 2019)

A. Youth who consume fruits and/or vegetable five or more times a day.	B. Youth who are physically active for at least one hour per day.
1. Grades 5-6 	**1. Middle School** 
2. Middle School 	**2. High School** 
3. High School 	

Adult Health Eating Active Living Objectives

Objective 1.8
By 2025, increase healthy eating and physical activity among Maine adults. (BRFSS, 2017 & 2019)

A. Adults who consume fruits or vegetable one or more times per day.	B. Adults who participate in enough physical activity to meet guidelines. (2019)
1. Fruit (2019) 	
2. Vegetables (2017) 	

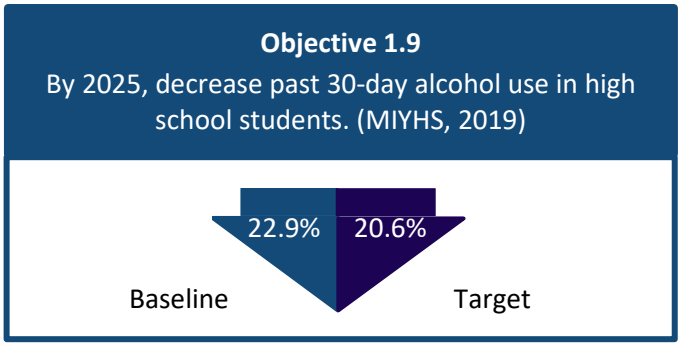
Healthy Eating Active Living Strategies[18]

- Increase access to, and the affordability of, healthier food and beverages in early childcare and education sites, schools, after school sites, community settings, and workplaces
- Increase public communications that support the consumption of healthier food and beverages, and physical education and physical activity
  - Increase opportunities for physical education and physical activity
  - Improve the built environment to create or support physical activity
- Increase the awareness and understanding of the benefits of breastfeeding and breast milk
- Increase understanding of the health and economic benefits of preventing obesity and promoting healthy weight
- Enhance public-private partnerships that are engaging in efforts to prevent obesity and promote healthy weight

Alcohol Use

Along with tobacco and obesity, alcohol use is a leading preventable cause of cancer. Alcohol use leads to 6 percent of all new cancer cases and 4 percent of cancer deaths. Drinking alcohol raises the risk of developing the following cancers: mouth and throat, larynx, esophagus, colon, rectum, liver, and female breast. When alcohol enters the body, it produces a harmful chemical which can damage the DNA of stem cells. Some people can process the chemical before it creates damage, but others cannot. When cells are damaged, they can grow out of control and create a cancer tumor. The more a person drinks, the higher the cancer risk. Alcohol causes cancer in other ways and combined with smoking, the risks are even greater.[19] Similar to youth tobacco use prevention, preventing use of alcohol in the early ages can reduce the risk for developing problems with alcohol as an adult. [20]

Youth Alcohol Use Objective



[18] The Maine Obesity Advisory Council Recommendations, Maine Department of Health and Human Services, Maine Center for Disease Control and Prevention, 2019

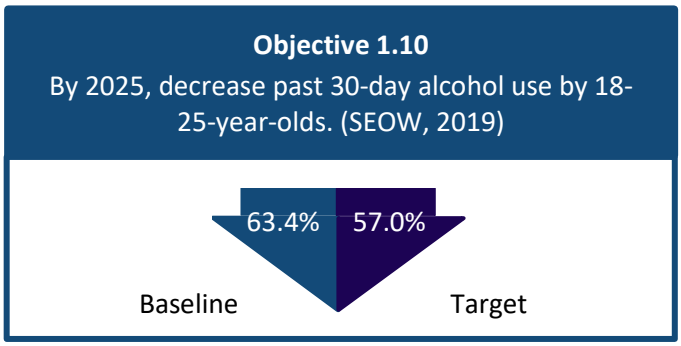
[19] https://www.cancer.org/cancer/cancer-causes/diet-physical-activity/alcohol-use-and-cancer.html

[20] Grant, BF, Dawson DA, Age at onset of alcohol use and its association with DSM-IV alcohol abuse and dependence: results from the National Longitudinal Alcohol Epidemiologic Survey. J Subst Abuse. 1997;9:103–110pmid:9494942

Youth Alcohol Use Strategies

- Increase parent and youth awareness of alcohol safety and prevention measures using messaging on social media at times youth are known to be at risk for consuming alcohol
- Increase knowledge of why, when, and how to check identification for alcohol purchases by distributing CARD ME guides to retailers with new liquor licenses
- Support Dirigo Safety, an agency that coordinates local law enforcement compliance checks, to ensure that retailers take proper identification steps for alcohol sales
- Engage youth in the Sticker Shock program to promote awareness of the dangers and illegality of purchasing alcohol for underage youth in convenience stores and supermarkets

Young Adult Alcohol Use Objective



Young Adult Alcohol Use Strategies

- Implement a media campaign, Party Smarter, to increase awareness of the immediate negative consequences of binge drinking and how to create a plan to stay safe
- Promote Responsible Beverage Service training to store managers for liquor licenses and their employees to improve knowledge and skills on when and how to check customer identification, how to spot fake identification, and how to avoid selling alcohol to intoxicated people

Radon and Arsenic

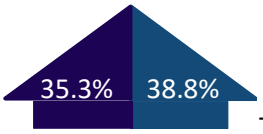
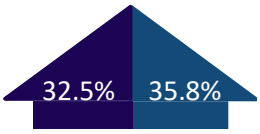
Radon is a gas that cannot be seen or smelled, yet high levels of radon gas occur naturally in the soil and water in Maine. The US Environmental Protection Agency classifies Maine as Zone 1 defined as a national region having indoor screening levels that are greater than the recommended levels of 4 pCi/L. Radon is the second leading cause of lung cancer after smoking, and the leading cause among those who don't smoke. Lung cancer is the leading cause of cancer related death in Maine. One in three homes in

Maine has high levels of radon. In fact, most counties (12) have higher than average levels of indoor radon. All homes in Maine should be tested for radon every 3-5 years.[21]

Arsenic is an element that also cannot be seen or smelled and enters drinking water through the soil and rock. Arsenic is a risk factor for bladder cancer and Maine has high rates of new bladder cancers.[22] Approximately 50 percent of homes in Maine use well water, and many wells with high levels of arsenic have been found across the state. All homes that use well water should be tested for arsenic every 3-5 years.[23]

Radon Objectives

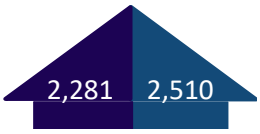
Objective 1.11
By 2025, increase radon testing in: (MTN, 2015-2016)

A. Owner-occupied structures	B. Non-seasonal residential rental properties
	

Radon Testing Strategies

- Educate the public, real estate, and health inspectors about radon prevention, testing, mitigation, cancer-related exposures, and existing laws
- Promote awareness of Maine CDC radon curriculum for schools
- Promote awareness about the relationship between radon, lung cancer, and smoking

Objective 1.12
By 2025, increase the number of households that install a radon mitigation system when they receive a high radon test result (MRP, 2019)

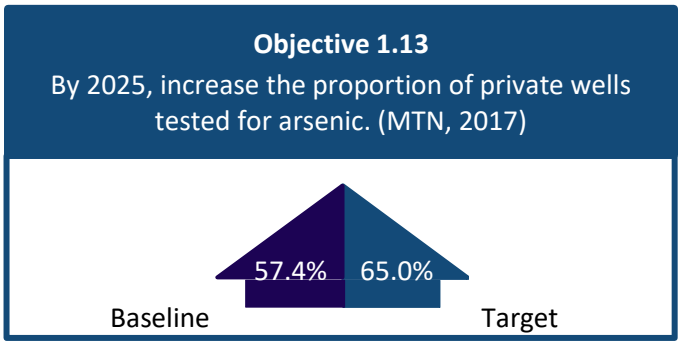


[21] https://www.maine.gov/dhhs/mecdc/environmental-health/rad/radon/radonfaq.htm
[22] Maine's high rates of bladder cancer are also likely due to tobacco use, obesity, and workplace exposure to chemicals from Maine's historical industries like leather and textiles.
[23] https://www.maine.gov/dhhs/mecdc/environmental-health/eohp/wells/mewellwater.htm

Radon Mitigation Strategies

- Educate the public about the importance of using registered radon mitigators
- Reduce financial barriers to installing radon mitigation systems in buildings that have elevated radon levels

Arsenic Objective



Arsenic Strategies

- Educate Mainers about arsenic and the importance of testing well water for carcinogens
- Promote Maine State Housing's Arsenic Abatement Program for low-income homeowners

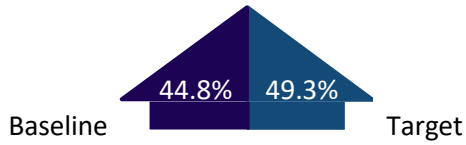
Human Papillomavirus (HPV)

The Human Papillomavirus, or HPV, is a common virus that can lead to six types of cancers (sites include cervix, vagina and vulva, anus, and back of the throat). HPV is common in both men and women and infections are on the rise. In most healthy adults, HPV will go away on its own, but for those where it does not go away, it can cause cancer. The good news is that a vaccine can help prevent these HPV-associated cancers including cervical, oropharyngeal, and anal cancer. The vaccine works best when given at an early age because it produces better immunity to fight the virus. According to the US CDC, providers can give the HPV vaccine to girls and boys beginning at age nine. If given early enough, youth only need two doses. If they receive the first vaccine after their 15th birthday, they need three shots to complete the series. Researchers and scientists in US CDC and the Food and Drug Administration have closely monitored the HPV vaccine for over 14 years and have shown that it is safe and effective.[24]

[24] HPV Vaccine Safety | CDC, https://www.cdc.gov/hpv/parents/vaccinesafety.html

HPV Objective

Objective 1.14
By 2025, increase the completion rate of HPV vaccination among male and female 13-year olds. (MIP, December 2019)



HPV Strategies

- Increased collaboration with public health community and providers to increase community awareness of HPV vaccination as cancer prevention
- Educate and disseminate best practice information to health care providers including:
  - School-based health centers
  - Dental community
  - Pharmacists
  - Providers – family medicine, pediatricians, primary care
- Support parent, patient, and community education
- Educate the public about the Maine's Vaccine for Children Program

Ultraviolet (UV) Radiation

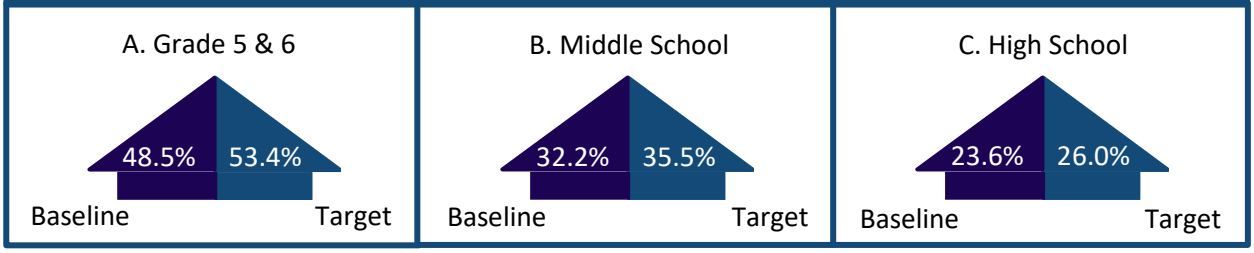
The rate of new cases of melanoma, a very serious form of skin cancer, is much higher in Maine than the US. This is a result of two factors, most Maine people are White (nearly 95 percent) and many do not take steps to stay out of the sun's harmful rays. Some people use tanning beds to speed-up the tanning process, exposing themselves to 5-15 times more UV rays than the sun.[25] Although people of any skin color can get skin cancer, people with lighter skin and those with a lot of moles have a higher risk. Reducing the amount of time spent in direct sunlight and using sunscreen that protects against UV rays may help reduce the amount of radiation to the skin. Any change in skin color is damage to the skin including a tan. In fact, damage can occur even if the skin does not change color. Seeking shade when outside and wearing protective clothing, including a hat and sunglasses, can also help reduce the damage of UV rays.

[25] Dore JF, Chignol MC. Tanning salons and skin cancer. *Photobiol. Sci.* 2012; 11, 30-7.

UV Radiation Objectives

Objective 1.15

By 2025, increase the proportion of youth that use a SPF of 15 or higher when outside for more than one hour on a sunny day. (MIYHS, 2019)

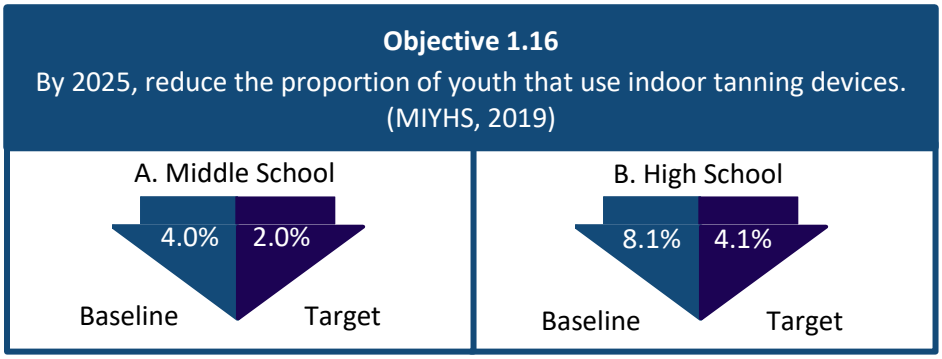


Youth UV Radiation Strategies

- Increase community access to sunscreen dispensers and shade structures
- Increase sunscreen use for outside workers
- Increase education and awareness of the dangers of unprotected sun exposure and skin cancer
- Collaborate with school-based educators to increase access to and use of sunscreen

Objective 1.16

By 2025, reduce the proportion of youth that use indoor tanning devices. (MIYHS, 2019)



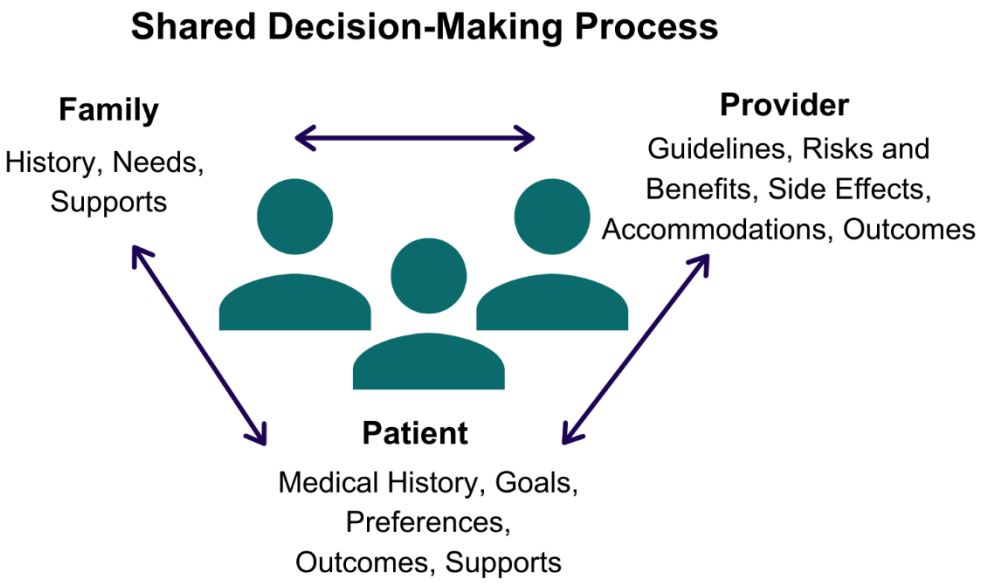
Youth Indoor Tanning Strategies

- Educate proprietors of indoor tanning facilities about the laws governing the use of tanning devices by those under age 18
- Monitor and support the enforcement of laws and regulations governing the use of indoor tanning devices by those 18 and under
- Collaborate with local, state, and regional partners to maximize resources to educate the public about skin cancer prevention and the risks associated with indoor tanning

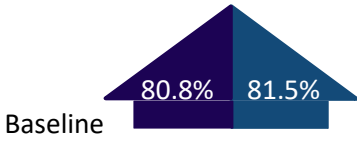
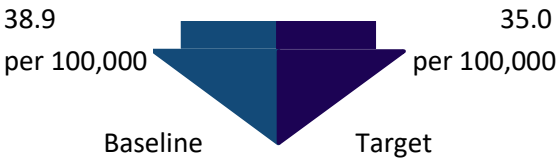
GOAL 2: SCREENING – INCREASE EVIDENCE-BASED SCREENINGS

Screening is a cornerstone of cancer control. Screening helps find cancer early which means earlier treatment. It can even prevent some cancers like colorectal and cervical cancer. Several professional groups have developed screening guidelines on the types of screening, the best age to start, and the frequency. These groups include the American Cancer Society (ACS), the US Preventive Services Task Force (USPSTF) as well as specialist groups (e.g. surgeons, radiologists, pathologists, family practitioners). The Maine CDC promotes USPSTF recommendations and follows updates and refinements every year.

Screening guidelines are generally described by health-care providers for the typical adult. Patients should discuss their medical history, family history, and/or genetics with their health-care providers so they can share in the decision-making about the options, time for first screening, or shortening the time between screenings. Shared decision-making, or the process of a patient discussing options and preferences with a provider, will help them learn more about a patient's history, values, and preferences and help both parties learn more about their options. Screening guidelines do change as researchers learn more, and it is important for patients to talk to their providers about the best screening plan for them.



Breast Cancer Screening Objectives

Objective 2.1	Objective 2.2
By 2025, increase the percentage of Maine women ages 50-74 who had a mammogram in the past two years. (BRFSS, 2018)	By 2025, reduce the number of new cases of female breast cancer diagnosed as late stage. (MCR, 2016-2018)
	

Breast Cancer Screening Strategies

- Partner with health-care providers, health systems, insurers, and MaineCare to increase uptake of breast cancer screening services:
  - Based on an individualized risk assessment for breast cancer, providers should have a discussion with patients to agree on when to start screening and testing frequency
  - Increase use of electronic medical record reminders to providers and patients when cancer screening test due
  - Improve office workflow to involve non-clinical staff to track mammogram referrals
  - Use patient navigators and/or community health workers to assist patients in scheduling and accessing screening services
  - Use Community Guide interventions to improve breast cancer screening uptake
- Educate people on how to start conversations with their health-care providers to assess their risk for developing breast cancer; based on their risk level have a discussion with the provider to agree on recommended screening schedule
- Promote breast cancer screening recommendations using public service announcements, videos, brochures, and posters in clinical and community spaces
  - Ensure all outreach and education materials use clear and effective communication and address populations with greatest needs
- Partner with employers to develop wellness policies that increase access to cancer screening, including a paid leave policy for cancer screening services

Cervical Cancer Screening Objectives

Objective 2.3 By 2025, maintain the percentage of Maine women ages 21-65 years old who had a Pap test within the past 3 years. (BRFSS, 2018)	**Objective 2.4** By 2025, the number of new cases of cervical cancer diagnosed as late stage is lower than (or does not exceed) current rate. (MCR, 2016-2018)
Baseline: 81.9% Target	Baseline: 2.3 Per 100,000 Target

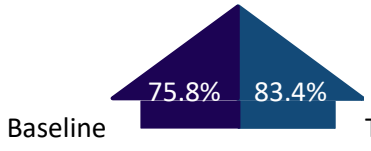
Cervical Cancer Screening Strategies

- Partner with health-care providers and health systems to maintain cervical cancer screening services:
  - Based on an individualized risk assessment for cervical cancer, have a discussion with patients to agree on the time to start screening and testing frequency
  - Increase use of electronic medical record reminders to provider and patient when cancer screening test due
  - Improve office workflow to involve non-clinical staff to track cervical cancer screening referrals
  - Use patient navigators and/or community health workers to assist patients in scheduling and accessing screening services
  - Use Community Guide evidence-based interventions to maintain Maine's cervical cancer screening rate
- Educate public on how to hold a conversation with health-care providers to assess individual risk for developing cervical cancer; based on risk level have discussion with provider on recommended screening schedule
- Promote cervical cancer screening recommendations using public service announcements, videos, brochures, and posters in clinical and community spaces
  - Ensure all outreach and education materials use clear and effective communication and address populations with greatest needs
- Partner with employers to develop wellness policies that increase access to cancer screening, including a paid leave policy for cancer screening services

Colorectal Cancer Screening Objectives

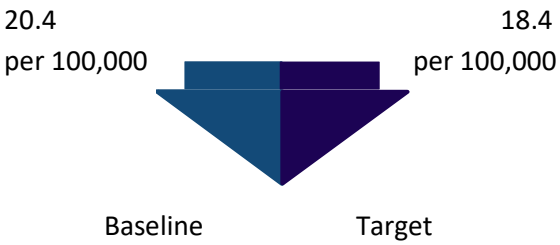
Objective 2.5

By 2025, increase colorectal cancer screening among eligible adults based on current US Preventive Services Task Force guidelines (including stool-based test, colonoscopy, sigmoidoscopy, or CT colonography). (BRFSS, 2018)



Objective 2.6

By 2025, reduce the number of new cases of colorectal cancer diagnosed as late stage. (MCR, 2016-2018)

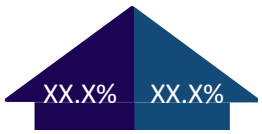


Colorectal Cancer Screening Strategies

- Create provider reminders that inform health-care providers it is time for a client's cancer screening test (called a "reminder") or that a client is overdue for screening (called a "recall")
- Create patient reminders either written (letter, postcard, email) or telephone messages (including recorded/automated messages) advising people that they are due for screening. Patient reminders can be general audience or tailored with the intent to reach one specific person
- Offer and discuss colorectal cancer screening options with patients
- Reduce barriers or obstacles that make it difficult for people to access cancer screening (e.g., inconvenient clinic hours, lack of transportation)

Lung Cancer Screening Objectives

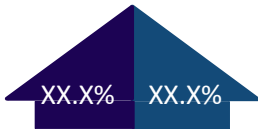
Objective 2.7
By 2025, increase lung cancer screening among eligible adults based on current US Preventive Services Task Force guidelines.
(BRFSS, 2018)



Baseline Target

(Baseline BRFSS, 2017-2018 data is pending and will be updated as available.)

Objective 2.8
By 2025, increase the rate of shared decision-making among adults who have received low dose computed tomography (LDCT) scan screening. (BRFSS, 2019)

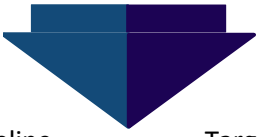


Baseline Target

(This is a new BRFSS question as of 2019. Baseline data and its corresponding target will be added to the plan as available.)

Objective 2.9
By 2025, reduce the number of new cases of late-stage lung cancer.
(MCR, 2016-2018)

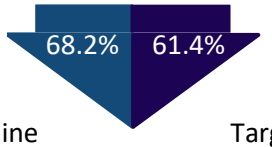
48.4 per 100,000



43.6 per 100,000

Baseline Target

Objective 2.10
By 2025, reduce the proportion of late-stage lung cancer from those diagnosed.
(MCR, 2016-2018)



Baseline Target

Lung Cancer Screening Strategies

- Increase access to LDCT scan screening among eligible adults
- Build statewide capacity to provide lung cancer screening with LDCT
- Educate providers, patients, and community about LDCT scan screening and the practice of shared decision-making between patient and provider

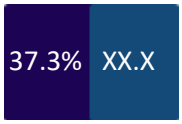
Prostate Cancer Screening Objectives

Objective 2.11

By 2025, establish Maine's baseline of evidence based prostate specific antigen (PSA) screening by age categories determined by the USPSTF guidelines, monitor, and set targets, if needed, to align Maine's rates with the guidelines. (BRFSS, 2016)
(Screening rates by age categories are determined by the USPSTF.)

A. Among Men Aged 40-54

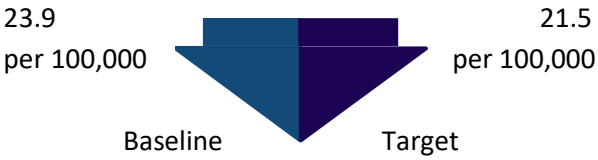
B. Among Men Aged 55-69



C. Among Men Over 70

Objective 2.12

By 2025, reduce the number of new cases of late stage prostate cancer.
(MCR, 2016-2018)



Prostate Cancer Screening Strategies

- Develop sustainable methods and funding for tracking prostate cancer shared decision-making
- Educate patients, health-care providers, and communities about shared decision-making
- Educate patients, health-care providers, and communities about the benefits and harms of PSA screening for different populations

GOAL 3: TREATMENT – INCREASE TIMELY, HIGH-QUALITY, AND EVIDENCE-BASED CANCER TREATMENT

Cancer treatment is complex, often includes conventional and alternative therapies, and is continually evolving. Maine is a rural state and access to quality cancer treatment requires most cancer patients to travel to receive care from multiple providers in different locations. The web of health systems, levels of insurance coverage, patient navigation, and community-based service providers all play a key role in supporting patients as they go through treatment. The best practice for good patient outcomes uses a shared decision-making approach among patients and providers about treatment options, costs, and benefits, as well as potential outcomes. The patient shares in the decisions about their care plan by working with the provider to develop goals of care and treatment plans to give them the opportunity to consider palliative care at any point in time.

Participation in oncology quality programming ensures that Mainers with a cancer diagnosis have access to comprehensive evidence-based care. Past Maine cancer plans highlighted the American College of Surgeons (ACoS) Commission on Cancer (CoC) quality program. While this cancer program accreditation remains the gold standard, Maine is fortunate to have oncology practices that also participate in the Association of Clinical Oncology's Quality Oncology Practice Initiative (QOPI®) and in the Center for Medicare & Medicaid Services Oncology Care Model.

Quality cancer programs provide access to clinical trials for their patients. Cancer clinical trials are used to explore new ways to prevent, detect, diagnose, or treat cancers. Participants in clinical trials have the opportunity to access new treatments that are not available to the public, receive expert medical care, and contribute to the advancement of medical research. The National Comprehensive Cancer Network has stated the best management for any cancer patient is in a clinical trial. Nationally, clinical trial participation is low at approximately three percent. Maine's baseline is 7.6 percent (BRFSS, 2012). Clinical trial opportunities are expanding in Maine, although the state has the same inequities in services that are seen nationally with low participation by the elderly, people of color, and people living in rural areas.

Contributing to our higher clinical trial participation rate are Maine's two CoC pediatric hematology oncology programs: Maine Children's Cancer Program, a part of the MaineHealth Cancer Care Network and Raish Peavey Haskell Children's Cancer and Treatment Center, a part of Northern Light Health. Both offer pediatric cancer patients access to Children's Oncology Group clinical trials.

Access to Cancer Care is Limited for Many People in Maine

- Travel distances of 100+ miles for cancer treatment are not uncommon in rural parts of Maine
- Patients in Aroostook and Washington Counties travel 100+ miles on average for inpatient cancer care
- Rural areas generally have higher rates of cancer incidence

Source: Maine Cancer Foundation Transportation Needs Assessment Summary Report, 2017

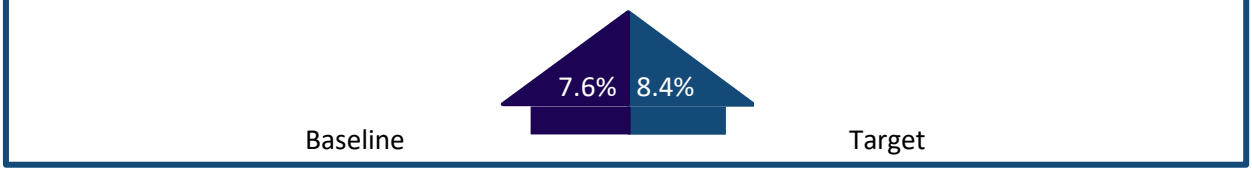
Treatment Objectives

Objective 3.1
By 2025, establish a baseline and monitor the number of patients treated at accredited hospitals and oncology practices in Maine. (MCR – in development)
(Accreditations include: CoC, NAPBC, NAPRC, ASCO QOPI)[26]

Cancer Care Treatment Quality Strategies

- Promote multidisciplinary tumor consult evaluation of the patient before treatment to identify multidisciplinary approaches to their care
- Increase the number of non-accredited hospitals or facilities that have a formal affiliation with accredited programs

Objective 3.2
By 2025, increase the percentage of Mainers that participate in clinical trials as part of cancer treatment from 7.6% to 8.4%. (BRFSS, 2012)
(Update baseline and target with BRFSS 2020.)



Clinical Trial Cancer Strategies

- Create and disseminate clinical trial information designed specifically for pediatrics, adolescents and young adult, geriatric, and rural populations
- Increase awareness of clinical trials for both the patient and provider (clinicaltrials.gov and other websites)
- Promote personalized medicine through genomic testing to increase clinical trial participation

[26] NAPBC – National Accreditation Program for Breast Cancer, NAPRC – National Accreditation Program for Colorectal Cancer

GOAL 4: SURVIVORSHIP – IMPROVE THE QUALITY OF LIFE FOR CANCER SURVIVORS

A cancer patient becomes a survivor on the day of diagnosis through the rest of their life. The number of cancer survivors living in the US continues to increase each year as a result of advances in early detection practices and treatment as well as the natural aging process. According to the American Cancer Society, as of January 1, 2019, there were about 95,540 cancer survivors in Maine. Over the next decade, the number of people who have lived 5 or more years after their cancer diagnosis is projected to increase by approximately 33 percent in the US.[27]

Maine has a rich history of addressing cancer survivorship issues and has many supports across the state for survivors. In 2019, a group of community cancer resource centers formed the Association of Maine Cancer Support Centers to enable them to collaborate across the state. These centers have missions that specifically address the needs of survivors through support groups, wellness programming, and other educational activities. The centers are located in both urban and rural areas of Maine and offer programming in-person and online to reach a larger audience of cancer survivors.

The Maine CDC released a Cancer Survivorship Data Brief in 2019.[28] The data in the brief focus on some of the issues faced by Maine cancer survivors and provide an opportunity to identify areas to improve the health and wellness of cancer survivors in Maine.

Survivorship Objectives

Objective 4.1

By 2025, increase the percentage of cancer survivors who receive a holistic/comprehensive survivorship care plan which includes a treatment summary, surveillance, recommendations for health promotion, and risk reduction. (BRFSS, 2020 pending)

Baseline and target will be established when BRFSS 2020 data is available

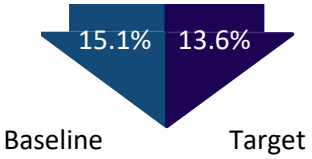
[27] Bluethmann S, Mariotto A, Rowland J, Anticipating the "Silver Tsunami": Prevalence Trajectories and Comorbidity Burden among Older Cancer Survivors in the United States. Cancer Epidemiol Biomarkers Prevention. July 1 2016 (25) (7) 1029-1036; **DOI:** 10.1158/1055-9965.EPI-16-0133

[28] https://www.maine.gov/dhhs/mecdc/population-health/ccc/documents/Cancer-Survivorship-Data-Brief-2019.pdf

Objective 4.2

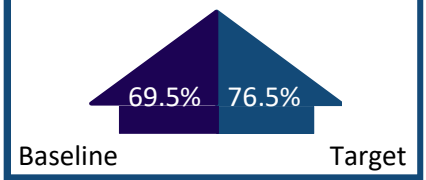
By 2025, improve health outcomes for Maine cancer survivors. (BRFSS, 2017 & 2018)

A. Reduce the number of cancer survivors who smoke. (BRFSS, 2018)

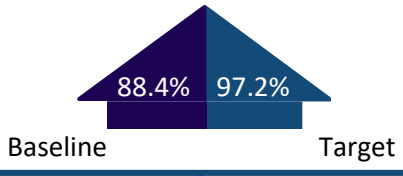


B. Increase the proportion of cancer survivors who:

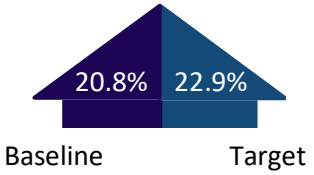
1. Consume fruits one or more times per day. (BRFSS, 2017)



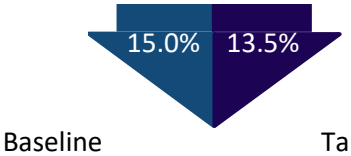
2. Consume vegetables one or more times per day. (BRFSS, 2017)



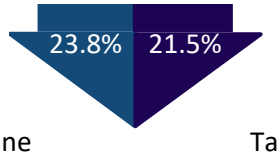
C. Increase the proportion of adults who engage in physical activity. (BRFSS, 2017)



D. Reduce the number of cancer survivors who experience poor mental health days. (BRFSS, 2018)



E. Reduce the number of cancer survivors who experience poor physical health days. (BRFSS, 2018)



Survivorship Strategies

- Increase patient and provider awareness, education and understanding of survivorship care plans, post-treatment effects and needs, and community resources and support
- Use the Maine QuitLink and 1-800-QUIT-NOW to identify and assist cancer survivors with tobacco treatment
- Increase awareness and knowledge of how health behaviors may increase cancer risk for cancer survivors

GOAL 5: PALLIATIVE CARE – ENSURE ALL PATIENTS HAVE COMPREHENSIVE, HIGH-QUALITY PALLIATIVE CARE THROUGHOUT THEIR CANCER DIAGNOSIS AND TREATMENT

Palliative care focuses on reducing the pain and symptoms associated with serious illness, including cancer. Palliative care is patient-centered, family-focused, and improves a person's quality of life. It does this by anticipating, preventing, and treating suffering caused by a medical illness, a physical injury, or other limiting health condition. At any time from diagnosis through treatment, the palliative care team can address physical, emotional, social, and spiritual needs. They can facilitate patient choices by discussing a patient's goals for treatment, treatment options, advanced care plans, and including, when appropriate, hospice care. The team helps the patient manage pain and symptoms in all aspects of treatment. Hospice care, which is often confused with palliative care, is the Medicare defined benefit that provides palliative care at the end of life.

The American Cancer Society reports that patients who had hospital-based palliative care visits spent less time in intensive care units, were less likely to be re-admitted to the hospital, and have better quality of life – even experiencing increased survival. The Center to Advance Palliative Care estimates that nationally up to 8 percent of people admitted to hospitals need palliative care, yet on average, only 3.4 percent receive it.

Palliative care resources are inadequate to meet the needs of Maine's cancer patients. To address this lack of services, the legislature established the *Palliative Care and Quality of Life Interdisciplinary Advisory Council* to improve the quality and delivery of patient-centered and family-focused care. There is much work ahead to achieve the vision of providing more palliative care services to more people across the state. Ongoing education to policymakers, providers, and the public about the role and value of palliative care is needed. As an important step to increasing palliative care services, the health-care providers will need to have their services covered by insurance companies including Medicaid and Medicare. Only then, will there be an increase of palliative care services in Maine.

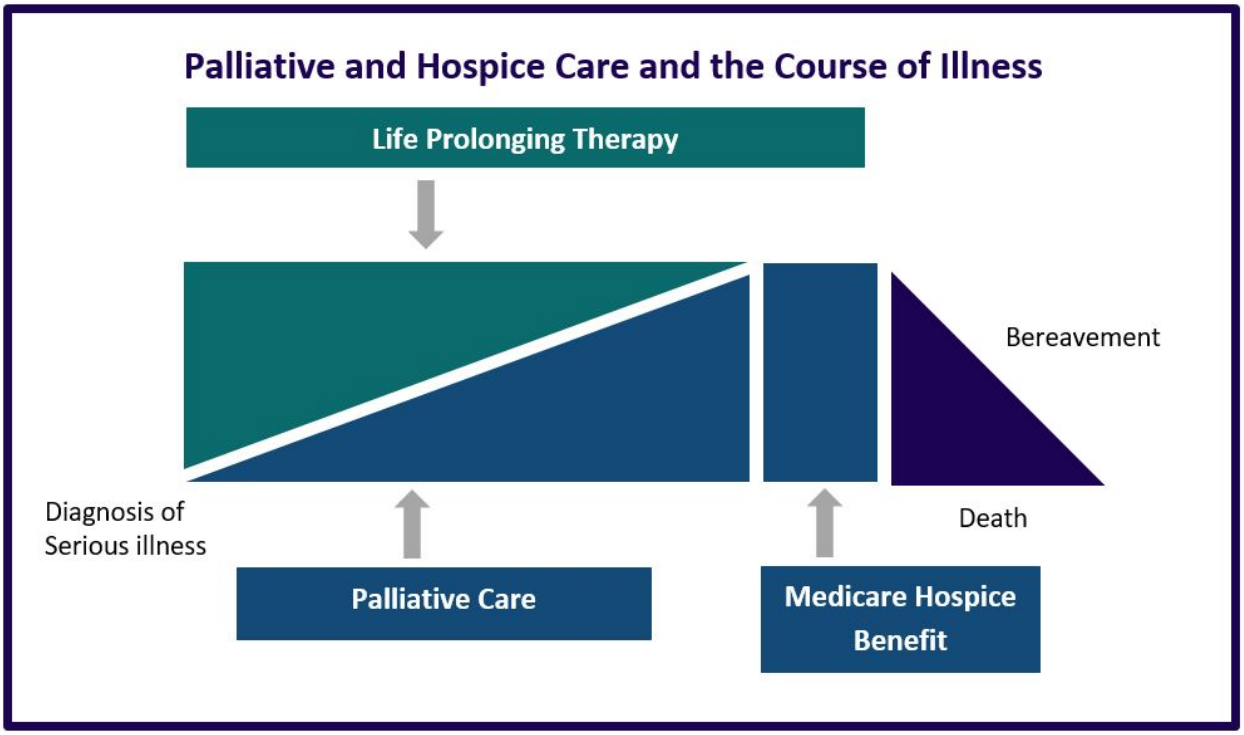
The palliative care workforce, like all health-care fields, experience problems with recruitment, retention, and staff burn out. Telehealth/telementoring strategies are beginning to be used to support community-based palliative care providers. These initiatives can expand to reach the populations in need and rural communities.

Palliative Care Objective

Objective 5.1
By 2025, increase utilization of palliative care services in Maine.
(Baseline: 76.9/B Grade, Center to Advance Palliative Care [CAPC] 2019 Survey)

Palliative Care Strategies

- Enhance data reporting compliance with CAPC Survey to ensure better quality reporting for Maine
- Increase awareness and understanding of the benefits of palliative care, among patients, families, providers, and community members
- Incorporate palliative care as part of the evidence-based standard of care
  - Increase implementation of goals of care conversations
  - Increase the use of interdisciplinary team-based (including patient and family) palliative care
  - Leverage innovation and technology to increase access to palliative care services



GOAL 6: END-OF-LIFE CARE – ENSURE TIMELY, HIGH-QUALITY END OF LIFE SUPPORT FOR CANCER PATIENTS

End-of-life/hospice care differs from palliative care in several ways. First, coverage is often limited to those with a life expectancy of six months or less. Second, hospice care includes support provided to family members and loved ones, including bereavement care for up to one year after the death. Hospice care is provided by a team of doctors, nurses, pharmacists, social workers, and other specialists who provide medical services, emotional support, spiritual resources, and other forms of practical assistance for cancer patients and their families. Hospice care can be delivered in the hospital, in a specialized hospice facility, in a skilled nursing facility, and in the home. Many patients with end-stage cancer can benefit from timely hospice enrollment to maximize quality of life and provide support for their families.

Maine has made significant progress expanding the use of hospice care. In 2004 Maine ranked 49th in the country. By 2016-2018, the state had progressed to 25th, and in 2019 rose again to 19th place. Over the course of this 15-year period, Maine averaged an improvement by two rankings per year.

The best time to discuss advanced care planning is at the time of diagnosis and early in treatment. This allows cancer patients and their families to have the information needed to support their decision-making throughout their cancer journey. The same workforce challenges that limit palliative care services in Maine also impact the workforce that supports end-of-life care. Promoting training for health professionals in both adult and pediatric hospice and palliative care would help to ensure better cancer care for all patients.

End-of-Life Care Objective

Objective 6.1
By 2025, increase awareness/utilization of quality hospice care in Maine.
(Data Source – Medicare Utilization Hospice Compare)

End-of-Life Care Strategy

- Increase awareness and understanding of high-quality hospice care (and difference from palliative care) among patients, providers, policy makers and community members

Maine Cancer Plan 2021-2025

Performance Measures		Baseline[1]	5-Year Target	Data Source
GOAL 1 – Reduce cancer risk through evidence-based strategies				
Tobacco Objectives				
1.1	Reduce the percentage of Maine youth that smoke cigarettes:			
	A. Middle school students	**1.5%** 2019	**1.4%**	**MIYHS[2]** Updated every other year
	B. High school students	**7.1%** 2019	**6.4%**	
1.2	Reduce the percentage of Maine youth that smoked cigarettes and/or cigars and/or used chewing tobacco, snuff, dip, dissolvable tobacco product or an electronic vaping product on one or more of the past 30 days.			
	A. Middle school students	**7.6%** 2019	**6.8%**	**MIYHS** Updated every other year
	B. High school students	**29.6%** 2019	**26.6%**	
1.3	Reduce the percentage of Maine youth that are exposed to environmental tobacco smoke:			
	A. Middle school students	**22.1%** 2019	**19.9%**	**MIYHS** Updated every other year
	B. High school students	**27.0%** 2019	**24.3%**	
1.4	Reduce the percentage of Maine adults that smoke cigarettes.	**17.6%** 2019	**15.8%**	**BRFSS[3]** Updated annually – two year delay
1.5	Reduce the percentage of Maine adults that report currently using any tobacco products (cigarettes, smokeless tobacco, e-cigarettes, or other tobacco products).	**23.5%** 2015	**21.2%**	
1.6	Reduce the percentage of Maine adults that indicate that someone (including themselves) had smoked cigarettes, cigars or pipes anywhere inside their home in the past 30 days.	**8.5%** 2017	**7.7%**	BRFSS Epidemiological calculation
Obesity Objectives				
1.7	Increase healthy eating and physical activity among Maine youth.			
	A. Youth who consume fruits and/or vegetables five or more times a day.			
	1. Grade 5-6 Students	**46.6%** 2019	**51.3%**	**MIYHS** Updated every other year
	2. Middle School Students	**20.9%** 2019	**23.0%**	
	3. High School Students	**15.2%** 2019	**16.7%**	
	B. Youth who are physically active for at least one hour per day.			
	1. Middle School	**25.5%** 2019	**28.1%**	**MIYHS** Updated every other year
	2. High School	**20.9%** 2019	**23.0%**	

1.8	Increase healthy eating and physical activity among Maine adults.			
	A. Adults who consume fruits or vegetables one or more times per day.			
	1. Fruits	**63.9%** 2019	**70.3%**	**BRFSS** Updated every other year
	2. Vegetables	**87.1%** 2019	**95.8%**	
	B. Adults who participate in enough physical activity to meet guidelines.	**20.6%** 2019	**22.7%**	
Alcohol Objectives				
1.9	Decrease past 30-day alcohol use in high school students.	**22.9%** 2019	**20.6%**	**MIYHS** Updated every other year
1.10	Decrease past 30-day alcohol use by 18-25-year-olds.	**63.4%** 2017-2018	**57.0%**	**SEOW**[4]
Radon and Arsenic Objectives				
1.11	Increase radon testing in:			
	A. Owner-occupied structures	**35.3%** 2015-2016	**38.8%**	**MTN**[5]
	B. Non-seasonal residential rental properties	**32.5%** 2015-2016	**35.8%**	
1.12	Increase the number of households that install a radon mitigation system when they receive a high radon test result.	**2,281** 2019	**2,510**	**MRP**[6]
1.13	Increase the proportion of private wells tested for arsenic.	**57.4%** 2017	**65.0%**	**MTN**
HPV Objective				
1.14	Increase the completion rate of HPV vaccination among male and female 13-year olds.	**44.8%** December 2019	**49.3%**	**MIP**[7] Updated quarterly
Ultraviolet Radiation Objectives				
1.15	Increase the proportion of youth that use a SPF of 15 or higher when outside for more than one hour on a sunny day:			
	A. Grade 5 & 6	**48.5%** 2019	**53.4%**	**MIYHS** Updated every other year
	B. Middle school students	**32.2%** 2019	**35.5%**	
	C. High school students	**23.6%** 2019	**26.0%**	
1.16	Reduce the proportion of youth who use indoor tanning devices.			
	A. Middle school	**4.0%** 2019	**2.0%**	**MIYHS** Updated every other year
	B. High school	**8.1%** 2019	**4.1%**	

GOAL 2 – Increase evidence-based screenings for all Mainers				
Breast Screening Objectives				
2.1	Increase the percentage of Maine women ages 50-74 who had a mammogram in the past two years.	**80.8%** 2018	**81.5%**	**BRFSS** Updated every other year
2.2	Reduce the number of new cases of female breast cancer diagnosed as late stage.	**38.9** per 100,000 2016-2018	**35.0** per 100,000	**MCR**[8] Annually
Cervical Screening Objectives				
2.3	Maintain the percentage of Maine women ages 21-65 years old who had a Pap test within the past 3 years.	**81.9%** 2018	**81.9%**	**BRFSS** Updated every other year
2.4	Number of new cases of cervical cancer diagnosed as late stage is lower than (or does not exceed) current rate.	**2.3** per 100,000 2016-2018	**2.3** per 100,000	**MCR** Annually
Colorectal Screening Objectives				
2.5	Increase colorectal cancer screening among eligible adults based on current US Preventive Services Task Force guidelines (including stool-based test, colonoscopy, sigmoidoscopy, or CT colonography).	**75.8%** 2018	**83.4%**	**BRFSS** Updated every other year
2.6	Reduce the number of new cases of colorectal cancer diagnosed as late stage.	**20.4** per 100,000 2016-2018	**18.4** per 100,000 MCR	**MCR** Annually
Lung Screening Objectives				
2.7	Increase lung cancer screening among eligible adults based on current US Preventive Services Task Force guidelines from X to X.	**Data Pending** 2017-2018	**TBD**	**BRFSS** Limited years
2.8	Increase the rate of shared decision making among adults who have received low dose CT screening.	**Data Pending** 2019	**TBD**	
2.9	Reduce the number of new cases of late stage lung cancer.	**48.4** per 100,000 2016-2018	**43.6** per 100,000	**MCR** Annually
2.10	Reduce the proportion of late stage lung cancer.	**68.2%** 2016-2018	**61.4%**	
Prostate Screening Objectives				
2.11	Increase evidence based prostate specific antigen (PSA) screening. (Screening rates by age categories are determined by the USPSTF.)			
	A. Among men aged 40 to 54	**11.3%** 2016	**TBD**	**BRFSS** Epidemiological calculation
	B. Among men aged 55-69	**37.3%** 2016	**TBD**	
	C. Among men over 70	**42.2%** 2016	**TBD**	

2.12	Reduce the number of new cases of late stage prostate cancer.	**23.9** per 100,000 2016-2018	**21.5** per 100,000	**MCR**
Goal 3 – Increase timely, high-quality, and evidence-based cancer treatment for all Mainers				
3.1	Establish a baseline and monitor the number of patients treated at accredited hospitals and oncology practices in Maine.	**Baseline Pending** 2019	**TBD**	**MCR**
3.2	Increase the percentage of Mainers that participate in clinical trials as part of cancer treatment.	**7.6%** 2012	**8.4%**	**BRFSS** Epidemiological calculation
Goal 4 – Improve the quality of life for cancer survivors in Maine				
4.1	Increase the percentage of Maine cancer survivors who receive a holistic/comprehensive survivorship care plan which includes a treatment summary, surveillance, recommendations for health promotion, and risk reduction.	**Baseline Pending** 2020	**TBD**	**BRFSS**
4.2	Improve the following health outcomes for Maine cancer survivors.			
	A. Reduce the percentage of survivors using tobacco	**15.1%** 2018	**13.6%**	**BRFSS**
	B. Increase the percentage of survivors who consume:			
	1. Fruits one or more times per day	**69.5%** 2017	**76.5%**	
	2. Vegetables one or more times per day	**88.4%** 2017	**97.2%**	
	C. Increase the percentage of survivors who engage in physical activity	**20.8%** 2017	**22.9%**	
	D. Reduce the percentage of survivors with poor mental health days (past month >13 days)	**15.0%** 2018	**13.5%**	
	E. Reduce the percentage of survivors who have poor physical health days (past month >13 days)	**23.8%** 2018	**21.5%**	
Goal 5 – Ensure all patients have comprehensive, high-quality palliative care throughout their cancer diagnosis and treatment				
5.1	Increase utilization of palliative care services in Maine.	**76.9/B Grade** 2019		CAPC Survey[9]
Goal 6 – Ensure timely, high quality end of life support for cancer patients				
6.1	Increase awareness/utilization of quality hospice care in Maine.	Medicare Utilization Hospice Compare		

Performance Measures Table Definitions

1. Baseline – established using the most recent data available and will be updated in subsequent updates of the plan.
2. MIYHS – Maine Integrated Youth Health Survey
3. BRFSS – Behavioral Risk Factor Surveillance System
4. SEOW – State Epidemiological Outcomes Workgroup
5. MTN – Maine Tracking Network
6. MRP – Maine Radon Program
7. MIP – Maine Immunization Program
8. MCR – Maine Cancer Registry
9. CAPC Survey – Center to Advance Palliative Care

GLOSSARY OF TERMS

Best practices – Best practices are strategies and actions that are known to be effective and are commonly used by professionals.

Cancer burden – Cancer burden is an estimate of the financial, emotional, or social impact that cancer imposes on a group of people.

Cancer control – Cancer control are the collective efforts made to reduce the burden of cancer including prevention, early detection, treatment, survivorship, and end-of-life care.

Cancer survivor – An individual is a cancer survivor from the time of diagnosis through the rest of their life.

Evidence based – Evidence-based programs or strategies have been proven by science and documented in publications. These include studies such as controlled clinical trials, independent evaluation, or other scientific inquiry.

Health disparities – Health disparities are measurable differences in health status or health outcome across different population groups.

Health inequities – Health inequities occur when groups of people lack access to health care, healthy living environments, or have poorer quality of care due to their race, ethnicity, gender, age, economic status, or region.

Health promotion – Health promotion is a strategy to increase people's awareness of and ability to take action to achieve and maintain good health. It often includes communication, policy changes, systems changes, or environmental changes.

Health risk factor – A risk factor is any genetic factor, behavior, characteristic, or exposure that increases the likelihood of developing a disease or injury.

Hospice care – Hospice care is provided at a patient's end-of-life and is focused on providing care and comfort to cancer patients, families, and caregivers. Planning for hospice care should begin at the time of diagnosis.

Incidence – Incidence is the number of newly diagnosed cases of cancer during a specific period.

Morbidity – Morbidity is the amount of disease within a population.

Mortality – Mortality is the number of deaths from cancer during a specific period.

Palliative care – Palliative care is patient care focused on providing relief from symptoms, pain, and stress of a serious illness. The primary goal is to work with patients and their families to provide a good quality of life.

Shared decision-making – Shared decision-making is the process of the patient and provider working together to determine the best choices for cancer screening and treatment. The patient and providers balance personal history and preferences with the medical advice to achieve a positive outcome and good quality of life.

REFERENCES AND RESOURCES

Cancer in Maine	• Listening Report, Maine Cancer Foundation, 2017 • Community Plan, Maine Cancer Foundation, 2018 • Maine Cancer Registry Reports • Maine Interactive Health Data • Maine Leading Causes of Death: Ten Most Common Causes 2018
Health Disparities	• National Cancer Institute, Cancer Health Disparities Definitions and Examples • The Way Health Should Be: Social Determinants of Health in Maine 2019 • National LGBT Cancer Network
Tobacco Use	• US CDC Smoking and Tobacco Use Fast Facts and Fact Sheets • Vital Signs: Cancer and tobacco use • Maine QuitLink, This Is Quitting, and 1-800-QUIT-NOW • NO BUTS! Training
Obesity	• The Maine Obesity Advisory Council Recommendations, 2019 • Vital Signs: Cancer and obesity
Alcohol Use	• American Cancer Society, Alcohol Use and Cancer • National Survey on Drug Use and Health • CARD ME
Radon	• Maine CDC Radon Tip Sheets on Testing, Mitigation, and Real Estate Transactions
Arsenic	• Maine State Housing's Arsenic Abatement Program
HPV	• HPV Vaccine Safety | CDC • National HPV Vaccination Roundtable • Vaccines for Children Program • Maine Immunization Rates
Screening	• Screenmaine.org • Community Guide • US CDC Screen Out Cancer • Maine CDC Breast and Cervical Health Program • National Colorectal Cancer Roundtable • National Lung Cancer Roundtable • Prostate Cancer – US CDC Resource
Survivorship	• Maine CDC Survivorship Data Brief 2019 • National Patient Navigator Roundtable
Palliative Care	• Center to Advance Palliative Care
Hospice Care	• Medicare Care-Compare Website

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