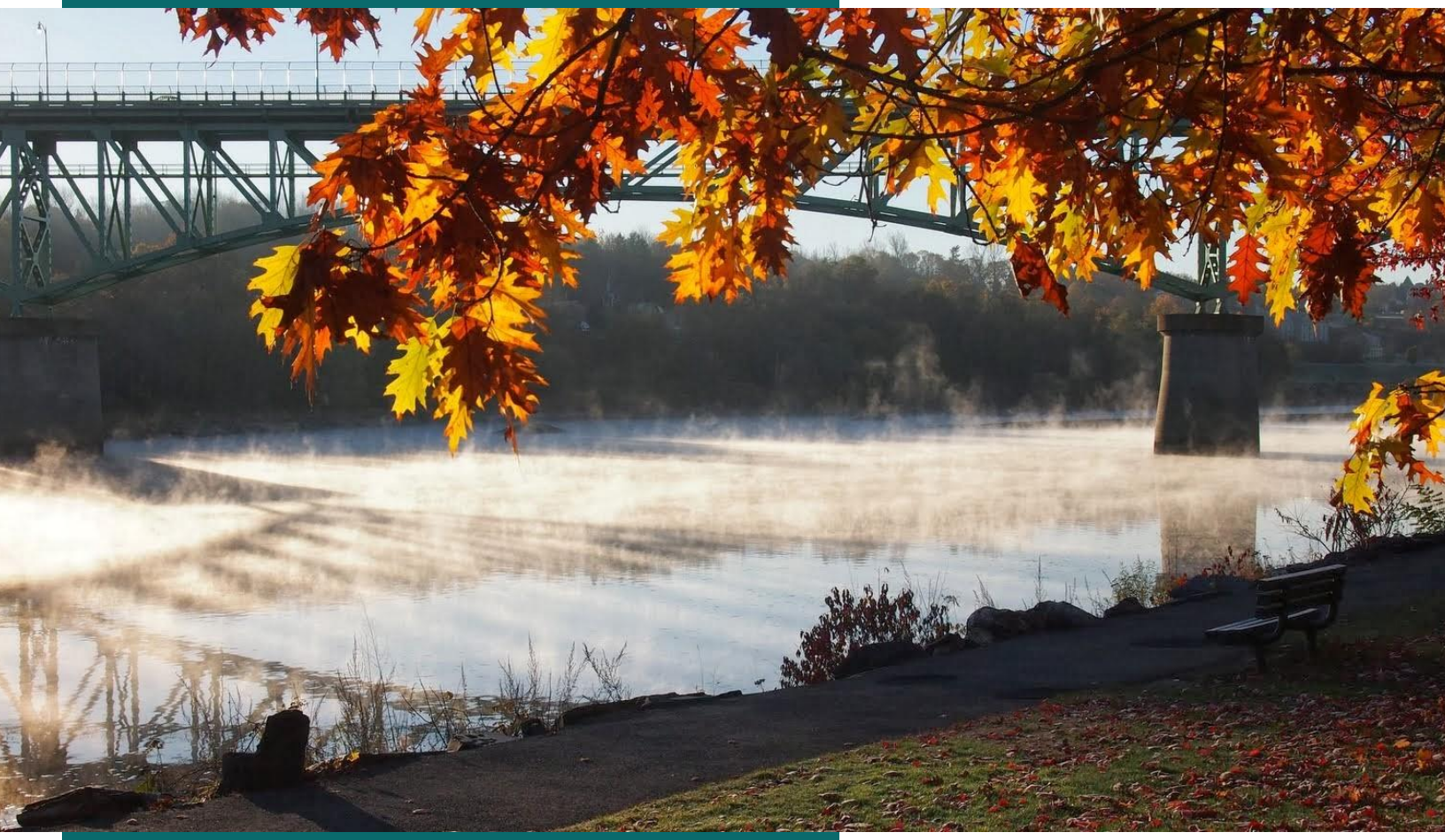
MAINE CANCER PLAN

2021-2030



Prepared by many cancer partners and the
Maine Center for Disease Control and Prevention's Cancer Programs.

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The recommendations herein reflect the work of contributors within and outside of state government. They do not reflect policy commitments of the Maine Department of Health and Human Services or the Maine Center for Disease Control and Prevention and further they do not confer support from the executive branch for specific legislative initiatives. Policy proposals will be reviewed and commented on as they arise.

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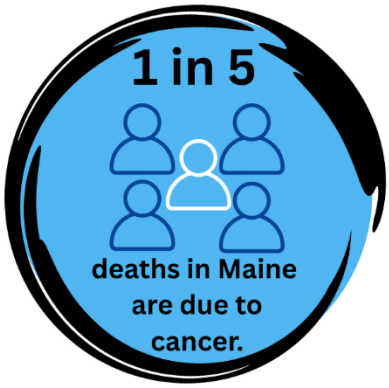
Executive Summary

Cancer has been a leading cause of death in Maine for the past 20 years. In 2022, there were 10,008 Mainers who were diagnosed with cancer, and 3,426 died from the disease. This equates to approximately 27 people who are diagnosed with cancer and 9 people who die of cancer each day. The incidence and death due to cancer has been declining over the past 20 years. However, Maine rates remain higher than the U.S. rates.

Cancer Burden in Maine



Cancer Plan Goals, Objectives, and Metrics

Executive Summary

Cancer Plan Framework

People Centered	• Equality and Integration • Shared Decision-Making
Community Focused	• Policy, Systems, and Environmental Changes
Outcomes Based	• Evidence Based • Measurement and Evaluation

The Maine Cancer Plan 2021-2030 is a framework for all to reduce the burden of cancer in our state. This was a collaborative effort that involved many partners who provided their insight and expertise on the development of this plan.

Nearly 300 partners provided input and feedback

- 14 • Members of cancer plan committees
- 117 • Electronic survey respondents
- 57 • Subject matter experts
- 42 • Listening session participants
- 60 • Cancer plan summit partners

This marks the 25th anniversary of Maine's first cancer plan released in 2001. Maine has made great strides in cancer control over the past quarter of a century. We celebrate our progress and invite all to join us as we work together to impact cancer in the next 25 years.

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Introduction

With the release of the Maine Cancer Plan 2021-2030, we celebrate 25 years of collaboration to reduce the burden of cancer in the state. This sixth edition of the statewide cancer plan is a 5-year extension of the previous plan, making this the first 10-year version of a cancer plan for Maine. From a data perspective, there is typically not much change in cancer over a 5-year period. Being able to look at a 10-year span allows us to better understand cancer trends. This also aligns the timeframe of the Maine Cancer Plan 2021-2030 with Healthy People 2030 at the federal level. In looking at other state cancer plans, many have begun moving to a 10-year version. Feedback about the previous plan was very positive; there were reports of people and organizations using it to apply for funding, when deciding on a project to take on, when looking to change workflows to increase cancer screening, and as a roadmap for their own organization's workplan. For these reasons, it was decided to extend the previous plan to a 10-year plan.

Comprehensive Cancer Control Framework

The National Comprehensive Cancer Control Program (NCCCP) 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. Through a cooperative agreement, the NCCCP provides funding, guidance, and technical assistance to state health departments to design and implement sustainable work to prevent and control cancer. The Maine Comprehensive Cancer Control Program (MCCCP), a program of the Maine Center for Disease Control and Prevention (Maine CDC), is tasked with collaborating with coalition partners statewide to develop and implement the statewide plan.

MCCCP 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 coalition partners to provide much-needed input to its comprehensive planning processes. Many partners across the state participated in the collective work of developing this edition of the Maine Cancer Plan 2021-2030.

Maine Cancer Plan 2021-2030 Development

The collaborative work of extending the previous plan to a 10-year version began in April of 2024. Working with the solid foundation of the previous plan, the cancer plan committee reached out to groups and organizations with subject matter expertise for recommendations and feedback. These partners included medical staff, non-profit organizations, the business community, individuals with lived experience, and government organizations. In total the committee's outreach included well over 300 partners who provided their input and insights into what ought to be in the cancer plan. Members of the cancer plan committee reached out to many groups including the Maine Prisoner Re-Entry Network, the Palliative Care and Interdisciplinary Quality of Life Council, Wabanaki Public Health, the National Cancer Institute's Alcohol Workgroup, and many programs within the Maine CDC.

Further feedback on the objectives and strategies in the plan was gathered using multiple methods. An online survey, which began at the 2024 Maine Public Health Association annual meeting and was sent to a listserv of over 200 cancer partners, received 117 responses. In November of 2024 two virtual listening sessions were conducted with approximately 40 partners in attendance. (See Appendix A for summary.) Recommendations from the online survey and the listening sessions were incorporated and presented at the Maine Cancer Plan Summit on April 9th, 2025, for one final public comment on the objectives and strategies complied for the new plan. At the Summit, approximately 60 partners confirmed the objectives of the plan and provided input on strategies to implement the objectives. (See Appendix A for summary.)

These reviews helped to refine as well as validate the work. The overall recommendations emphasize equity, collaboration, cultural competence, and accessibility to address cancer related disparities across Maine's diverse communities. In some cases, the revisions were more extensive, such as the Alcohol Use section within the Prevention Goal. We are learning more and more about the risks of consuming alcohol and its association with cancer. In other sections, the objectives remained the same, but the supporting information was freshened, and new information was added. Two new objectives were added to Goal 5 on palliative care using a survey that is implemented every five years. There is also a measurable objective added to Goal 6 on end-of-life care. Although the data for this goal can be measured, it doesn't get at the *quality* of care for an individual at the end-of-life. Work will continue to find a measurable quality objective for Goal 6 for the next cancer plan.

Burden of Cancer

Incidence

Four out of 10 people in the U.S. will be diagnosed with cancer in their lifetime.[1] In Maine, it is estimated that 11,080 people will be diagnosed with cancer in 2025.[2] This equates to approximately 30 individuals in the state receiving a cancer diagnoses each day. Over the past 20 years, Maine's overall cancer incidence rate has declined and, more recently, leveled off. However, even with this decrease, Maine's cancer incidence rate remains significantly higher than the U.S. rate (478.9 per 100,000 and 442.3 per 100,000, respectively – see Figure 3).

Mortality

Cancer has been a leading cause of death in the U.S. for several decades,[3] and in Maine has consistently been a leading cause of death for the past 20 years. It is estimated that in 2025 about 3,540 people in Maine will die from cancer, which is nearly 10 individuals per day. Since 2000, Maine has seen an average decline of 1.5 percent per year in cancer mortality rates (moving from 211.7 per 100,000 people down to 159.9 per 100,000 people). However, Maine's overall rate remains significantly higher than the U.S. rate of 142.3 per 100,000 people (see Figure 1).

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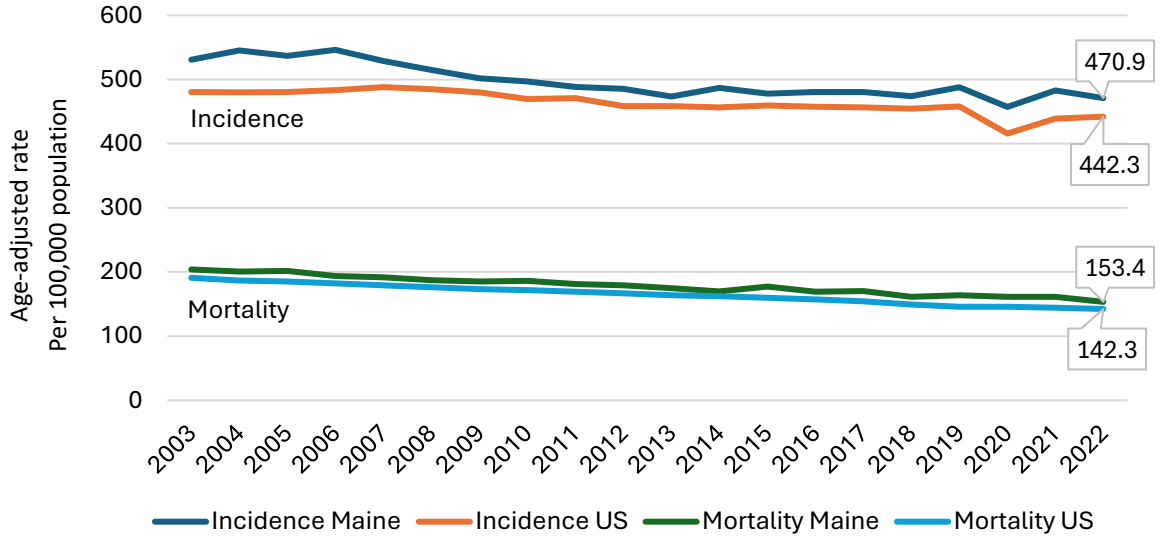
[1] https://www.cancer.gov/about-cancer/understanding/statistics
[2] American Cancer Society. *Cancer Facts & Figures 2025*. Atlanta: American Cancer Society; 2025.
[3] Hoyert DL. 75 years of mortality in the United States, 1935–2010 NCHS data brief, no 88. Hyattsville, MD: National Center for Health Statistics. 2012.

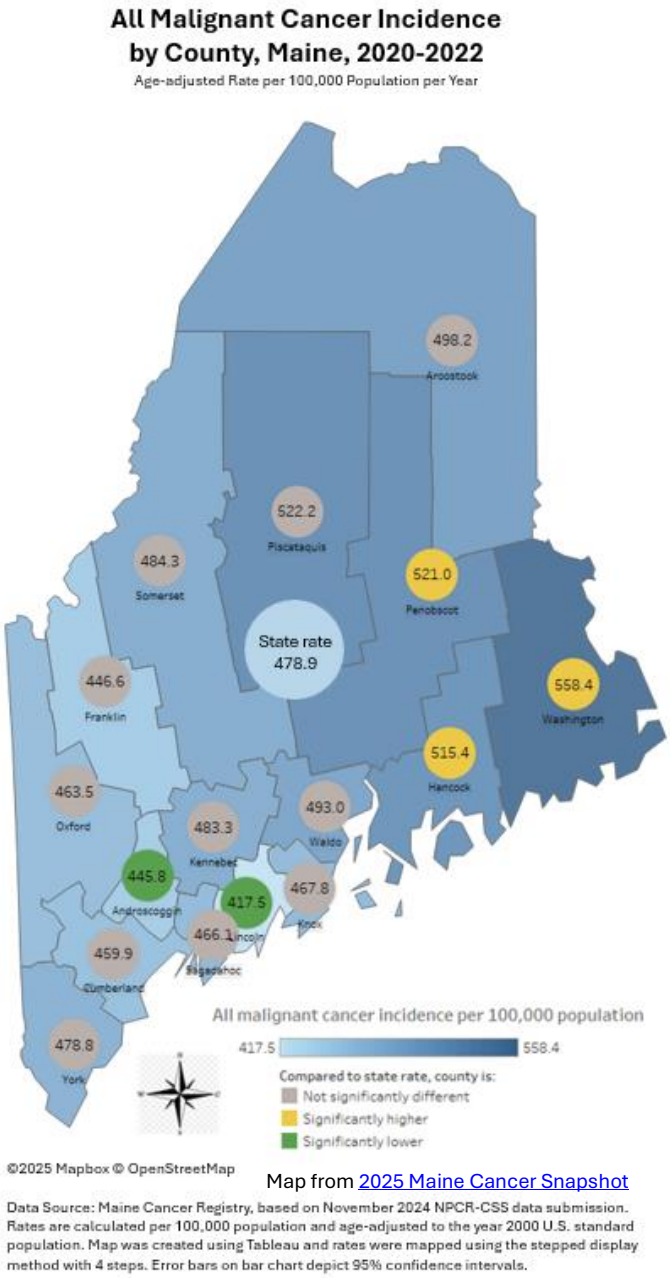
Figure 1. All Cancer Incidence and Mortality, Maine and U.S., 2003-2022



Incidence by County

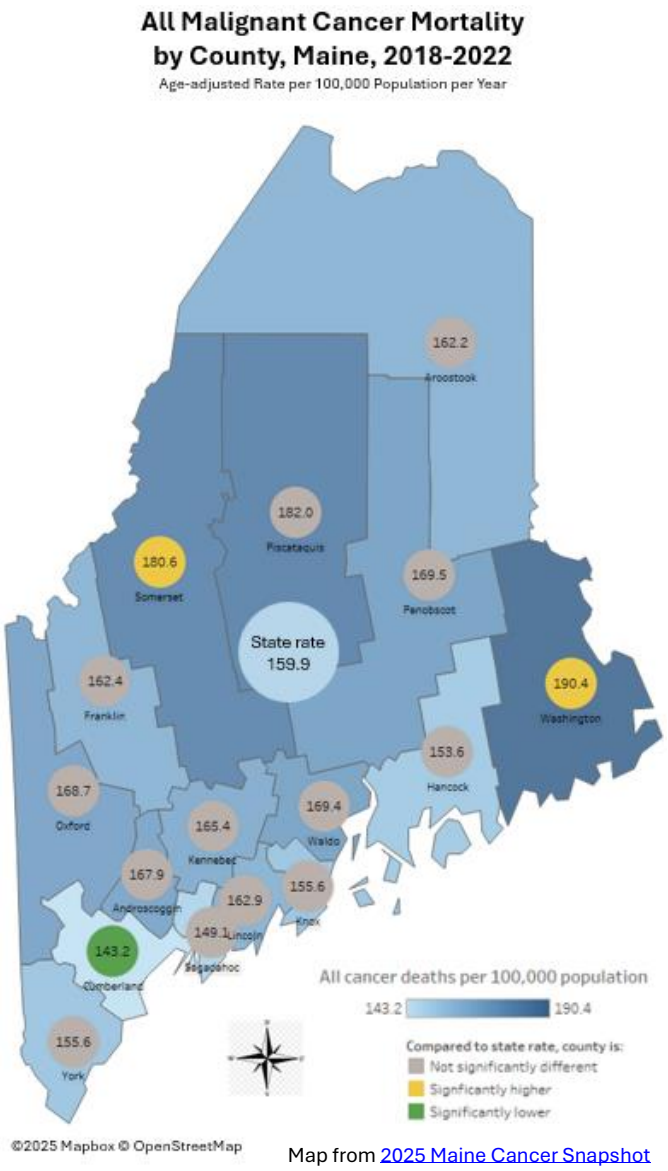
Androscoggin (445.8 per 100,000) and Lincoln (417.6 per 100,000) Counties have a significantly lower overall cancer incidence rate than the state rate of 478.9 per 100,000. Washington (558.4 per 100,000), Penobscot (521.0 per 100,000), and Hancock (515.4 per 100,000) Counties have significantly higher overall cancer incidence rates than the state.

Over the past 20 years, Maine's overall cancer incidence rate has declined and, more recently, leveled off. However, even with this decrease, Maine's cancer incidence rate remains higher than the U.S. rate.



Map from 2025 Maine Cancer Snapshot

Data Source: Maine Cancer Registry, based on November 2024 NPCR-CSS data submission. Rates are calculated per 100,000 population and age-adjusted to the year 2000 U.S. standard population. Map was created using Tableau and rates were mapped using the stepped display method with 4 steps. Error bars on bar chart depict 95% confidence intervals.



Map from 2025 Maine Cancer Snapshot

Data Source: Maine Mortality: Maine CDC's Data, Research, and Vital Statistics. Rates are calculated per 100,000 population and age-adjusted to the year 2000 U.S. standard population. Map was created using Tableau and rates were mapped using the stepped display method with 4 steps. Error bars on bar char depict 95% confidence intervals.

Mortality by County

There are two counties in Maine that have significantly higher overall cancer mortality rates compared to the state rate of 159.9 per 100,000: Somerset (180.6 per 100,000 and Washington (190.4 per 100,000). The only county in Maine to have a significantly lower overall cancer mortality rate than the state is Cumberland County at 143.2 per 100,000.

Maine's overall mortality rates have been declining over the past 20 years, yet Maine's rate remains high when compared to the rest of the country.

Most Common Cancers

There are six cancer types that represent nearly 60 percent of all new cancer cases in Maine: lung and bronchus, female breast, prostate, colon and rectum, urinary bladder, and melanoma of the skin. The leading causes of cancer death in Maine are cancers of the lung and bronchus, pancreas, colon and rectum, prostate, and female breast (representing 50 percent of cancer-related deaths). See Figures 2 and 3.

Figure 2. Top Six Types of New Cases of Cancer in Maine, 2022

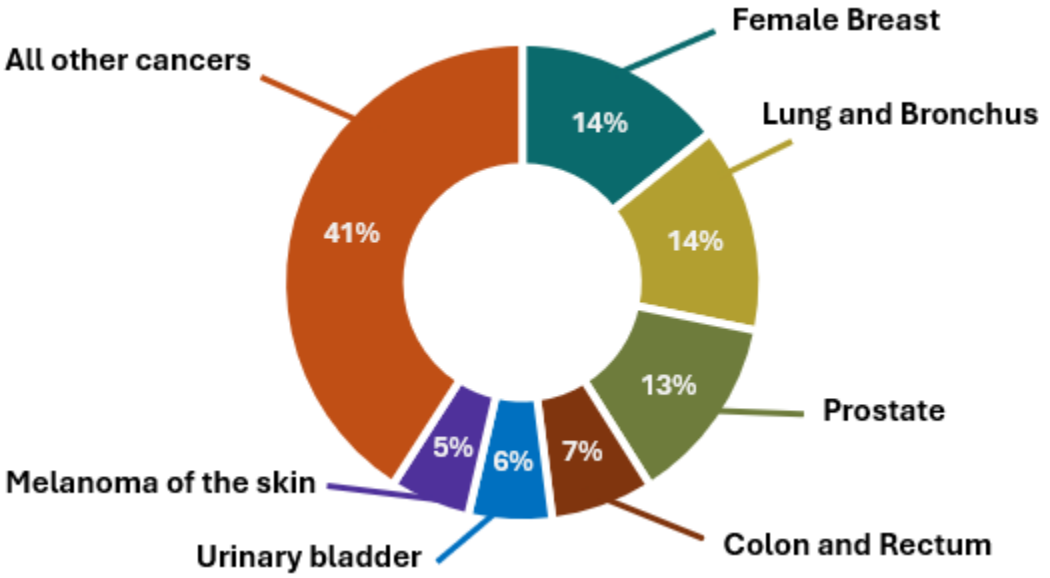
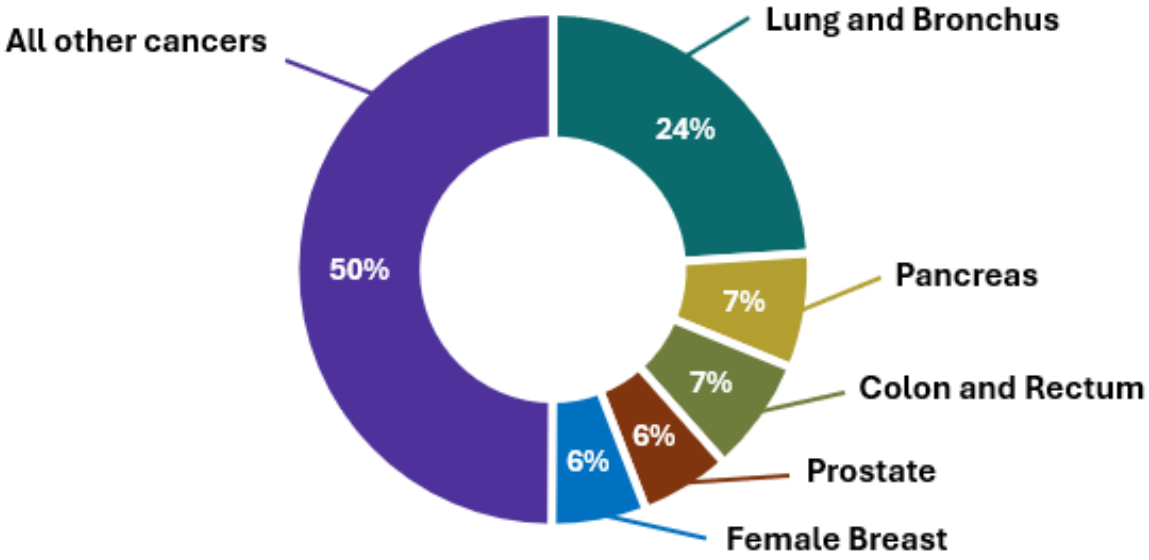


Figure 3. Top Five Types of Cancer Deaths in Maine, 2022



Maine remains one of the oldest states in the nation,[4] and risk for developing cancer increases with age. Most new cancer cases and cancer deaths in Maine occur among adults aged 65 and older. While nearly 60 percent of new cancer cases are among Mainers aged 65 and older, more than 70 percent of cancer deaths also occur in this age group.[5]

Impact of COVID-19

The COVID-19 pandemic impacted many aspects of cancer. There were delays in cancer screening; limits to cancer care access; reduced medical system resources which in turn led to delays in hospital cancer reporting; fewer new cancer diagnoses than expected in 2020; a rise in cancer-related deaths; limited early research on the efficacy of COVID-19 vaccines in cancer survivors; and COVID-19 infection in patients on active cancer treatment.[6,7] Even with these challenges, the pandemic also saw a rise in the implementation of telemedicine.[7] This allowed patients to talk with their providers without risking exposure to other diseases/viruses. The Maine Cancer Plan 2021-2030 recognizes the real impacts of COVID-19 on cancer care, control, and prevention. Although new cancer cases for some cancer types have returned to pre-pandemic counts, there are some cancer types that are still a little lower than expected. The reporting of outcome data will play a critical role in understanding the impacts and pinpointing priority areas for action moving forward.

Underlying Drivers of Cancer in Maine

Factors such as age, income, education, race, and where a person lives impacts many aspects of access to healthcare. It's not only about being able to get to an appointment or affording medical care, but also about being able to communicate with clinical staff, trusting your provider, feeling safe and respected, among others. For example, if an individual does not have insurance, they are less likely to engage in regular cancer screenings due to out-of-pocket cost or lack of a primary care provider. Even with insurance coverage, lack of transportation, language barriers, or concern about invasive procedures can prevent individuals from seeking care and being screened for cancer. This can lead to finding cancer at a later stage when it becomes more difficult to treat. Rural states, like Maine, struggle to provide cancer services to less populated areas, forcing many patients to travel long distances for care. Maine geography and demographics influence cancer risk and are important considerations when planning cancer prevention and treatment programs. Implementing strategies that reduce disadvantages and improve access to services for people experiencing inequities leads to better health for all. This plan makes a sincere attempt to use language that is inclusive of all people.

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[4] Population Reference Bureau https://www.prb.org/resources/which-us-states-are-the-oldest/

[5] Huston SL, Cross J, Yob D, Bancroft C, Green-Parsons A, Teach F, Haggan K. Cancer in the Elderly in Maine. Augusta ME: Maine Department of Health and Human Services, Maine Center for Disease Control and Prevention, Maine Cancer Registry; 2022.

[6] Jabbal IS, Sabbagh S, Dominguez B, Itani M, Mohanna M, Samuel T, Nahleh Z. *Impact of COVID-19 on Cancer-Related Care in the United States: An Overview.* Curr Oncol. 2023 Jan 4;30(1):681-687. doi: 10.3390/curroncol30010053. PMID: 36661702; PMCID: PMC9858078. https://pmc.ncbi.nlm.nih.gov/articles/PMC9858078/

[7] Serban Negoita MD, DrPH, Huann-Sheng Chen PhD, Pamela V. Sanchez MPH, CTR, Recinda L. Sherman MPH, PhD, CTR, S. Jane Henley MSPH, Rebecca L. Siegel MPH, Hyuna Sung PhD, Susan Scott MPH, Vicki B. Benard PhD, Betsy A. Kohler MPH, Ahmedin Jemal DVM, PhD, Kathleen A. Cronin PhD, MPH
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A Useful Guide

The Maine Cancer Plan 2021-2030 serves as a common guide for all those wanting to make a positive impact on cancer in the state. This document shares the most current cancer data available 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 partners across the state. At the heart of the document there is a need to address the inequities experienced by Maine people due to race, gender identity, income level, or region. By giving attention to those most impacted, we can reduce the burden of cancer for everyone in Maine.

There are a variety of uses for many audiences. Any individual or group interested in making a difference to prevent, reduce the risk of, and provide care for cancer survivors, can use this plan as a guide.

- At the highest levels, it provides lawmakers and opinion leaders with information about the burden of cancer in our state and outlines key strategies to reduce that impact.
- Policy makers can use the plan to understand priorities and the need to build capacity for palliative and hospice care services for all people.
- 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. Working together, we can make a big difference in reducing the burden of cancer in Maine.

Goals

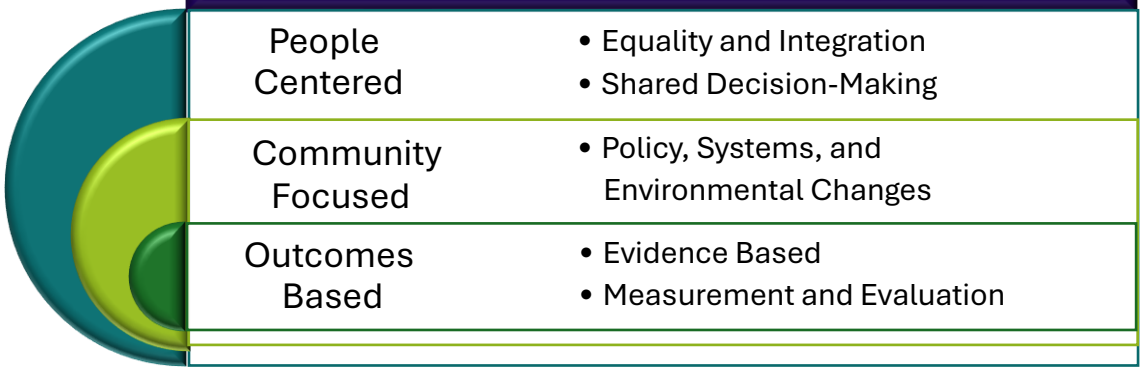
The goals of the Maine Cancer plan 2021-2030 span all stages of care from promoting healthy behaviors that can prevent cancer, reducing poor health outcomes for cancer survivors, and increasing the use of end-of-life care in Maine (see Figure 4). Each goal has three parts: a goal statement, objective(s), 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 a target for 2030. The Cancer Data Advisory Group will work with partners to monitor the objectives and measures. The strategies include evidence-based programs and practices that are known to improve health and reduce risks of cancer. One aim of this plan, when possible, is to include data sources that are accessible and easy for anyone to find.

Figure 4. Plan Goals

Framework

The Maine Cancer Plan 2021-2030 continues to have five foundational themes that support the goals, objectives, and strategies, see Figure 5. The first two themes – "Equality and Integration" 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 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 5. Maine Cancer Plan 2021-2030 Framework



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 to 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. Shared decision-making creates an opportunity for people to make decisions based on clinical input and personal preferences.

Policy, Systems, and Environmental Changes

This plan includes many strategies that promote policy, systems, or environmental changes because of their potential to have great impact in cancer control and prevention. They can help to remove barriers and create healthier options for many people in many settings. These types of changes can also lead to lasting improvements and reach more people. 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.

Areas of Continued Focus

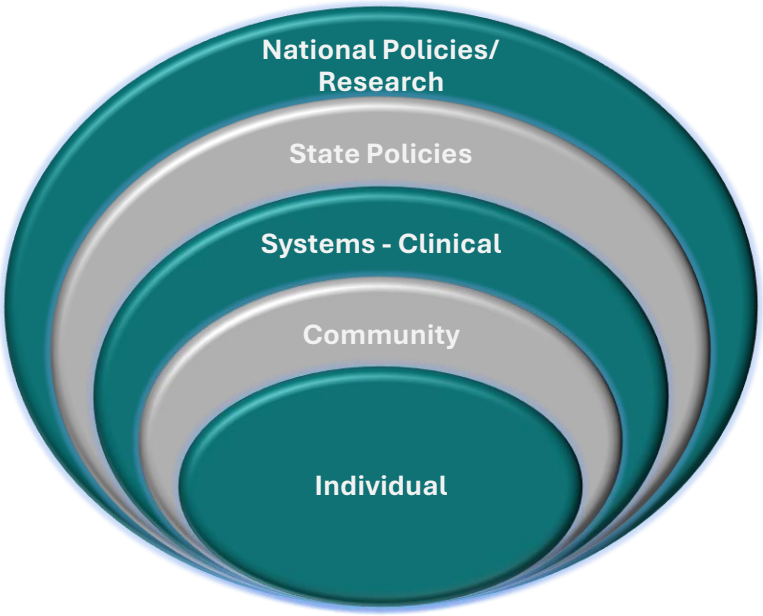
While not an exhaustive list, the categories listed in Figure 6 were identified through the cancer plan extension process. These areas continue to rise to the top but lack evidence and/or data to include as objectives. These topics will continue to be monitored over the next five years of this plan and can be incorporated into the next 10-year plan if evidence and data emerge. These topics go beyond the intent of extending this plan to a 10-year version. For more information on each of these areas click on the link in a box or see Appendix B.

Figure 6. Topics for Continued Attention			
Adolescents and Young Adults	BIPOC Black, Indigenous, and People of Color	Cancer in Older Adults	Disabilities
Environmental Toxins	LGBTQIA+	Men with Breast Cancer	Mental Health
Oncology Workforce	Opioid (Mis)use	System Capacity Resource Constraints	Veterans

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). 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. There are advocates for new treatment technologies including radiation and surgical oncology, medications, clinical trials, and payments for experimental treatments. This plan unites the work of all types of advocates, showing the collective impact of those efforts.

Figure 7. Levels of Engagement and Advocacy



Evidence-Based Objectives and Strategies

With a focus on having the most impact, the objectives and strategies for each goal in this plan are evidence-based. This means researchers have proven that they are effective in achieving positive impacts. The Cancer Plan Committee reached out to subject matter experts to further refine the strategies for what works best in Maine. In addition, the plan relies on the cancer care clinical guidelines developed by medical boards and supported by the NCCCP. However, there are several sets of national guidelines used by health professionals and caregivers that have overlapping recommendations on cancer prevention and care.

The plan has Specific, Measurable, Actionable, Realistic, and Timebound (SMART) objectives that will be tracked and reported as data becomes available. A subcommittee of the Data Advisory Workgroup agreed that the baselines for the objectives in this extension would be data that were available in 2021. Targets were set by using a tool from Healthy People 2030[8] that calculates targets based on a 10 or 20 percent increase or decrease. Where the targets calculated by the tool didn't make sense with current data, exceptions were made on a case-by-case basis.

The previous five-year plan had a total of 54 metrics. Over the course of that plan, some metrics needed to be replaced due to survey question changes, updated screening recommendations, and not having access to data anymore. A total of 42 metrics were able to be tracked for the full five

[8] Healthy People 2030 Target-Setting Methods, https://odphp.health.gov/healthypeople/objectives-and-data/data-sources-and-methods/target-setting-methods

years, and of those, 16 (or 38%) either improved significantly or the targets set for 2025 were met and/or exceeded, three worsened, and 23 had no change over the five-year period (see Table 1). The three objectives that worsened were: 1) middle school students who were physically active for at least one hour per day, 2) increasing radon testing in non-seasonal rental properties, and 3) increasing the households that install a radon mitigation system when receiving a high radon test result. The radon mitigation was likely due to using the number rather than percentage of households each year. That metric has been updated for this plan.

Table 1. Metrics from the Maine Cancer Plan 2021-2025

Total metrics	Able to track all 5 years	Metrics that worsened	Metrics that improved significantly or targets were met and/or exceeded	Metrics with no significant change
54	**42**	**3**	**16**	**23**

The Maine Cancer Plan 2021-2030 has 47 objectives for a total 57 metrics that the Maine CDC cancer programs will track over the next five years. The updates to the Performance Measures table for this plan will be shared annually with partners. As new data emerge or if the method for collecting data changes, the Performance Measures table will be revised to reflect the changes.

GOAL 1 – Prevention: Reduce Cancer Risk Through Evidence-Based Strategies

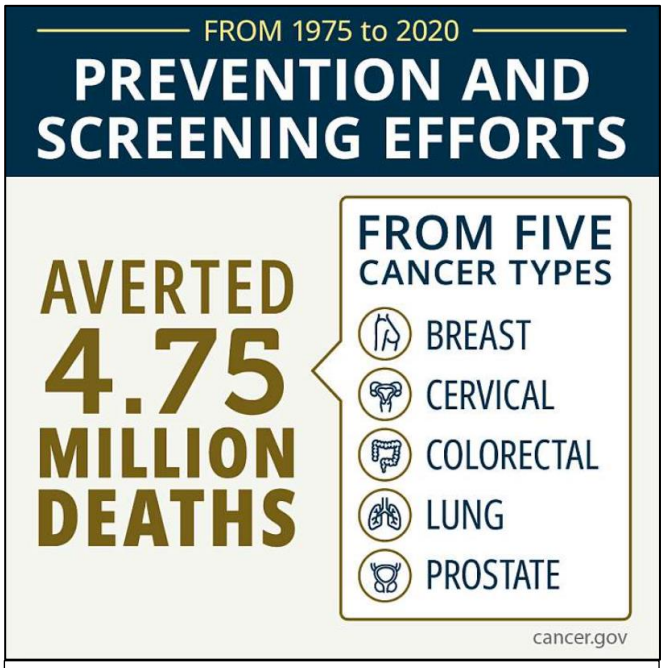


Figure 8: 4.75 million deaths averted due to prevention and screening efforts

The good news is that we can prevent many forms of cancer by focusing on prevention and early detection strategies. A study by the National Cancer Institute estimated 4.75 million deaths in the U.S. were averted between 1975-2020 because of prevention and screening efforts (see Figure 8).[9]

Changing routines can be hard, so showing children how to develop good choices early in life can help put them on the right path from the start. When it comes to healthy behaviors, we know that using tobacco or drinking alcohol increases the risks of cancer, while eating nutritious foods, engaging in physical activity, and maintaining a healthy weight reduces the risks. Applying sunscreen, wearing sunglasses, and seeking shade are also simple steps to block dangerous ultraviolet rays that can cause cancer. In addition to making these healthy choices, we can make sure our homes are healthy by checking for radon gas inside the house, and testing for arsenic and radon in well water.

It's easier to make choices that reduce our cancer risk when we have access to affordable, quality health care, when we can study, work, play, and live in environments free of toxins, and when we have supportive systems, structures, programs, and policies that enable us to meet our day-to-day needs. However, we know this is not the case for many people in Maine, making it more difficult to prevent and detect cancer. Through the implementation of the strategies in this plan, and the efforts of other organizations in Maine, we can work toward more equitable cancer prevention and early detection.

[9] Goddard KAB, Feuer EJ, Mandelblatt JS, et al. Estimation of Cancer Deaths Averted From Prevention, Screening, and Treatment Efforts, 1975-2020. JAMA Oncol. 2025;11(2):162–167. https://jamanetwork.com/journals/jamaoncology/article-abstract/2827241

Alcohol Use

According to the 2025 Surgeon General's Report on alcohol and cancer, alcohol is a known carcinogen, and drinking alcohol raises the risk of developing the following seven types of cancer: female breast, colon, rectum, liver, mouth, throat, voice box, and esophagus (see Figure 9).[10] 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. Alcohol use leads to 6 percent of all new cancer cases and 4 percent of cancer deaths in the U.S.[11]

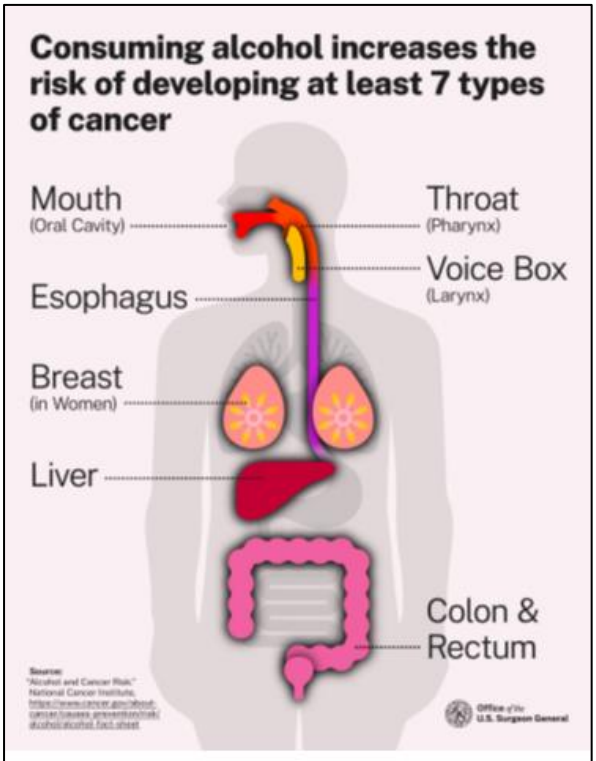


Figure 9: Consuming alcohol increases the risk of developing at least 7 types of cancer.

The more a person drinks, the higher the cancer risk, and for some types of cancer (mostly breast cancer) even small amounts of alcohol can increase risk.[10] Alcohol causes cancer in other ways and combined with smoking, the risks are even greater.[12] Similar to youth tobacco use prevention, preventing youth from using alcohol can reduce the risk for developing problems with alcohol as an adult.[13] There are benefits to consuming less alcohol beyond reducing cancer risk including: improved sleep quality, healthier skin, weight loss, increased energy, and saving money. Knowing how much alcohol you are consuming can be deceiving and/or deceptive. Figure 10 below is an infographic from CDC *Vital*signs™ depicting standard drinks sizes by alcohol type.

Even drinking small amounts of alcohol on a regluar basis can increase your risk of developing cancer.[10]

[10] Surgeon General's Report on Alcohol and Cancer Risk 2025 https://www.hhs.gov/surgeongeneral/priorities/alcohol-cancer/index.html
[11] https://www.cancer.org/cancer/risk-prevention/diet-physical-activity/alcohol-use-and-cancer.html#:~:text=Alcohol%20use%20is%20one%20of,between%20alcohol%20use%20and%20cancer
[12] https://www.cancer.gov/about-cancer/causes-prevention/risk/alcohol/alcohol-fact-sheet
[13] 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. Journal of Substance Abuse. 1997;9:103–110 PMID:9494942

Figure 10: The number of ounces in a "standard drink" of alcoholic beverages[14]

Alcohol Objectives and Strategies

Youth Alcohol Use Objectives		
1.1	By 2030 **reduce** the percentage of youth who report using alcohol in the past 30 days. (MIYHS)	A. Middle School Baseline, 2019 4.0% Current, 2023 4.8% Target, 2030 3.6% B. High School Baseline, 2019 22.9% Current, 2023 20.5% Target, 2030 18.8%

[14] https://www.cdc.gov/alcohol/standard-drink-sizes/index.html#:~:text=Standard%20alcohol%20drink%20sizes,alcohol%20by%20volume%20(ABV).

Youth Alcohol Use Objectives Continued

1.2	By 2030 **reduce** the percentage of youth who report binge drinking in the past 30 days. (MIYHS)	A. Middle School Baseline, 2019 1.3% Current, 2023 1.8% Target, 2030 0.4% B. High School Baseline, 2019 32.7% Current, 2023 36.1% Target, 2030 28.1%

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 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
- Educate the workforce on benefits and strategies to include youth in community prevention work

Adult Alcohol Use Objectives		
1.3	By 2030 **reduce** the percentage of Maine adults (ages 18 and older) at-risk from heavy alcohol use in past month. (BRFSS)	Baseline, 2019 8.9% Current, 2023 8.2% Target, 2030 6.3%
1.4	By 2030 **reduce** the percentage of past month binge drinking in Maine adults (ages 18 and older). (BRFSS)	Baseline, 2019 17.0% Current, 2023 15.0% Target, 2030 13.4%
1.5	By 2030 **reduce** the percentage of Maine adults (ages 18 and older) with any alcohol use in the past month. (BRFSS)	Baseline, 2019 57.0% Current, 2023 55.5% Target, 2030 52.0%

Adult Alcohol Use Strategies

- Implement a media campaign, The Sipping Point, to increase awareness of the immediate negative consequences of binge drinking and how to create a plan to stay safe
- Promote Responsible Beverage Server and Selling Training to store, bar, and restaurant 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
- Promote ongoing continuing education for health professionals about talking with their patients about their alcohol use (e.g., Time to Ask and NIH-Core Resource on Alcohol)
- Establish and promote policies that are proven to reduce harmful alcohol use (e.g., increase alcohol taxes)

HUMAN PAPILLOMAVIRUS (HPV)

Human Papillomavirus, or HPV, is a common virus that can lead to six types of cancers including: cervical, oropharyngeal, vulvar, anal and rectal, penile, and vaginal (see Figure 11). HPV is common and in most healthy adults will go away on its own. When it does not go away, it can cause cancer. The good news is that a vaccine can help prevent these HPV-associated cancers.

The vaccine works best when given at an early age before a person is exposed. This allows the vaccine time to produce better protection to fight the virus. The CDC recommends 2 doses between the ages of 11-12 years. It can be started as early as age 9, and there has been a recent push to begin the vaccine at 9 because of when other vaccines are due. If the first dose is given at age 11, a child might have 2 or 3 different shots in one visit. This sometimes doesn't sit well with either the parent or the child, and since the HPV vaccine isn't mandatory, it can easily be delayed—despite its life saving potential. If a teen does not get their first dose until after their 15th birthday, they will need 3 doses—which is another reason to start early. Researchers and scientists at CDC and the Food and Drug Administration have closely monitored the HPV vaccine for nearly 20 years and have shown that it is safe and effective.[15]

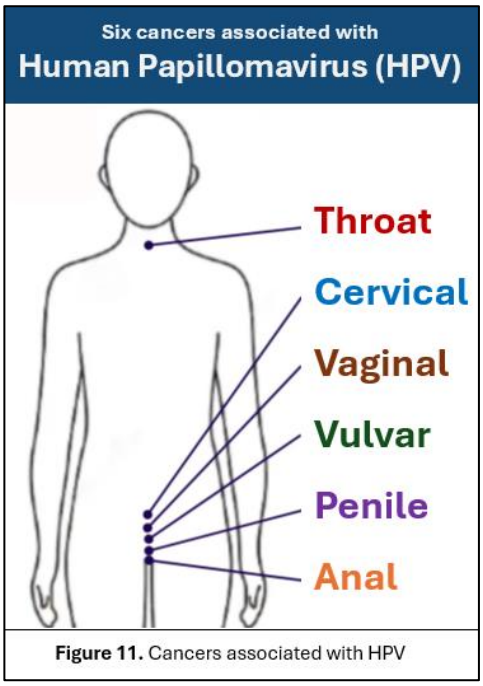


Figure 11. Cancers associated with HPV

The HPV vaccination can PREVENT many cancers.

This plan has added an objective about eliminating cervical cancer (see Cervical Cancer Screening Objectives, page 36) by following the World Health Organization's 2018 Cervical Cancer Elimination Initiative.[16] One way to help eliminate cervical cancer is by promoting HPV vaccination completion by age 15.

The vaccine can be given up to age 26, but the vaccine does not protect a person from any HPV strains they have already been exposed to beforehand. The Advisory Committee on Immunization Practices has recommended the HPV vaccine for adults aged 27-45.[17] But again, the vaccine does not protect against HPV strains that a person has already been exposed to and does require a shared decision-making visit with a healthcare provider prior to administration to ensure the individual is a good candidate.

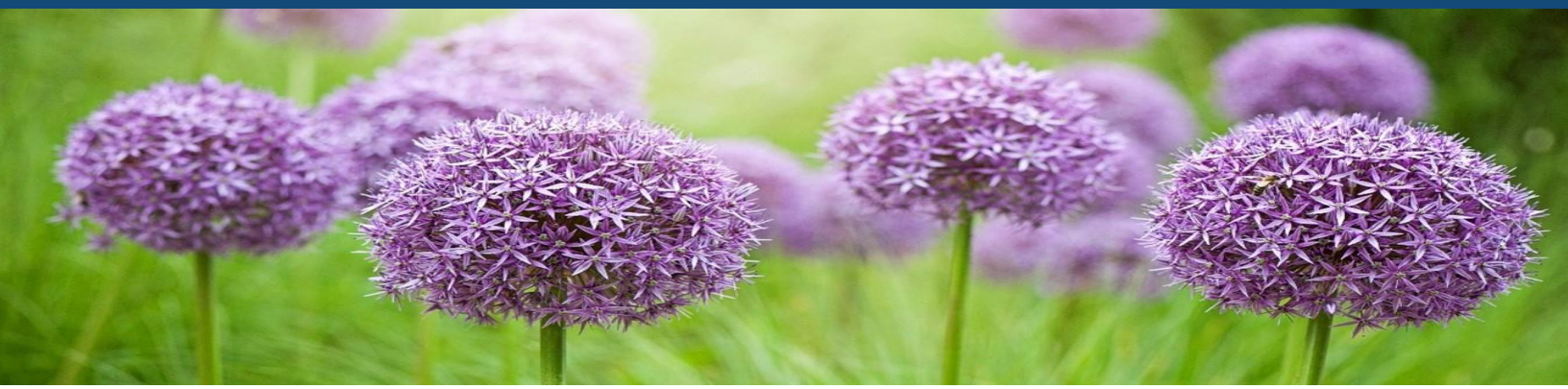
[15] HPV Vaccine Safety | CDC, https://www.cdc.gov/hpv/parents/vaccinesafety.html
[16] https://www.who.int/initiatives/cervical-cancer-elimination-initiative
[17] https://www.cdc.gov/mmwr/volumes/68/wr/mm6832a3.htm

HPV Objectives and Strategies

HPV Objectives		
1.6	By 2030 **increase** the initiation of the HPV vaccination series among adolescents aged 9-12 years. (ImmPact)	Baseline, 2024 19.6% Current, 2024 19.6% Target, 2030 25.0%
1.7	By 2030 **increase** the completed HPV vaccination series among adolescents aged 13-17 years. (NIS-Teen)	Baseline, 2024 63.5% Current, 2024 61.2% Target, 2030 68.2%

HPV Strategies

- Collaborate with the public health community and providers to increase community awareness of the HPV vaccination as cancer prevention
- Educate and disseminate best practice information on the HPV vaccine recommending initiation at ages 9-12 and completion by age 15 to providers including:
  - School-based health centers
  - Dental communities
  - Pharmacists
  - Medical – family medicine, pediatricians, primary care
- Provide parent, patient, and community education
- Educate the public about the Maine's Vaccine for Children Program
- Improved reporting of HPV vaccination in the Maine CDC immunization reporting system (ImmPact) through an online Tableau database
- Educate patients and providers on HPV recommendations for those up to age 26 and the required shared decision-making process for 27–45-year-olds



OBESITY – HEALTHY EATING AND ACTIVE LIVING (HEAL)

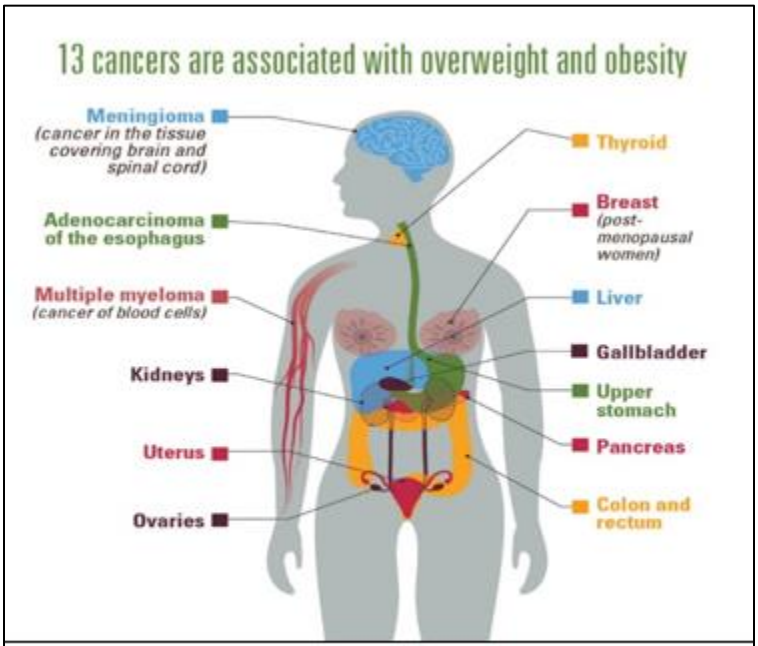


Figure 12. Cancers associated with overweight and obesity

In 2013, the American Medical Association officially recognized obesity as a chronic disease.[18] 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 their condition. By using "People First Language" health professionals can treat patients that ***have*** obesity and overweight with the same respect and dignity as patients with other diseases such as diabetes and cancer.

In the U.S., one in three individuals has obesity, a leading risk factor for at least 13 different types of cancer including colorectal, esophageal, and uterine (see Figure 12).[19] In Maine, colorectal cancer is the fourth most diagnosed cancer, and the third leading cause of cancer-associated death. Thyroid cancer incidence in females and esophageal mortality rates for all adults is significantly higher than the U.S. rate.[20] With 32.6 percent of Maine adults having obesity and 35.3 percent having overweight,[21] the number of people diagnosed with these cancers are likely to rise.

If able, breastfeeding can help to reduce the risk of developing breast cancer for the mother,[22] and breast milk is also associated with a lower risk of obesity in children.[23]

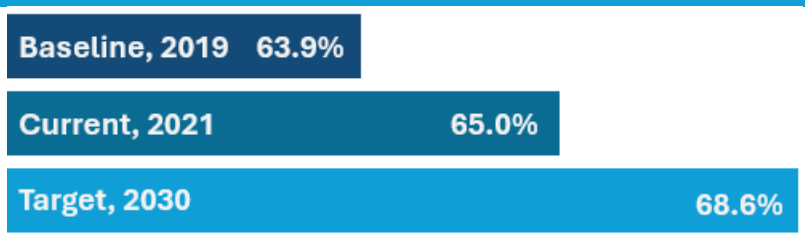
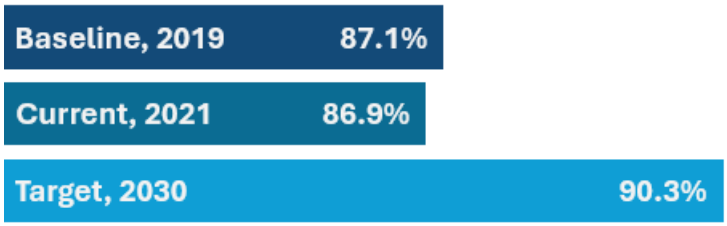
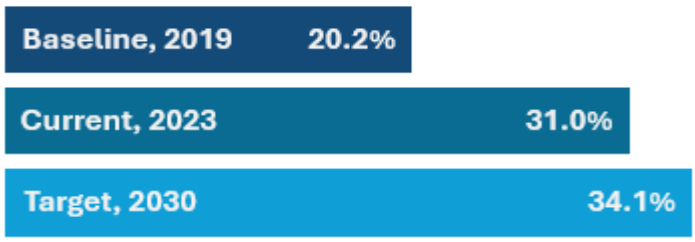
[18] https://policysearch.ama-assn.org/policyfinder/detail/obesity?uri=%2FAMADoc%2FHOD.xml-0-3858.xml
[19] https://www.cdc.gov/cancer/risk-factors/obesity.html
[20] 2025 Maine Cancer Snapshot
[21] https://www.cdc.gov/brfss/
[22] https://pmc.ncbi.nlm.nih.gov/articles/PMC9972148/
[23] https://pmc.ncbi.nlm.nih.gov/articles/PMC9459704/

Obesity/HEAL Objectives and Strategies

Youth HEAL Objectives

1.8	By 2030 **increase** the percentage of youth who consume fruits and/or vegetables five or more times a day. (MIYHS)	A. Grades 5-6 Baseline, 2019 46.6% Current, 2023 46.8% Target, 2030 51.6% B. Middle School Baseline, 2019 20.9% Current, 2023 18.9% Target, 2030 22.7% C. High School Baseline, 2019 15.2% Current, 2023 14.2% Target, 2030 19.0%
1.9	By 2030 **increase** the percentage of youth who are physically active for at least one hour per day during the past seven days. (MIYHS)	A. Middle School Baseline, 2019 25.5% Current, 2023 27.9% Target, 2030 34.6% B. High School Baseline, 2019 20.9% Current, 2023 24.0% Target, 2030 29.6%

Adult HEAL Objectives

1.10	By 2030 **increase** the percentage of Maine adults who consume fruit one or more times per day. (BRFSS)	
1.11	By 2030 **increase** the percentage of Maine adults who consume vegetables one or more times per day. (BRFSS)	
1.12	By 2030 **increase** the percentage of Maine adults who participate in enough aerobic and muscle strengthening exercises to meet guidelines. (BRFSS)	

HEAL Strategies[24]

- 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 communication that supports 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

[24] The Maine Obesity Advisory Council Recommendations

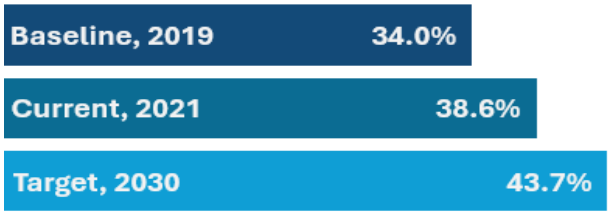
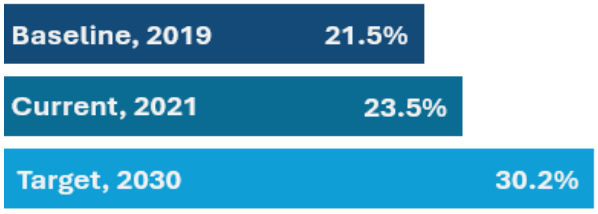
Radon and Arsenic

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 U.S. Environmental Protection Agency classifies Maine as a Zone 1 area for radon, defined as a national region having indoor screening levels for radon that are greater than the recommended levels of 4 pCi/L.[25] Radon is the second leading cause of lung cancer after smoking, and the leading cause among those who don't smoke. Smoking in a home with high radon levels has a compound effect and increases the risk of lung cancer,[26] and 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. It is recommended that all homes in Maine be tested for radon every 3-5 years.[27]

There are a few laws in Maine that are helping to lower the radon risks in the state. In 2014, a law went into effect that requires landlords to test their residential properties for radon every 10 years when requested by a tenant and report the results to their tenants.[28] The 2019 Radon Law recommends school administrative units to test for radon every five years and requires the use of radon-resistant construction techniques when building new schools.[29] The 2020 Maine Gold Standard for Radon Testing and Mitigation Initiative also requires new home construction to include a system for passive radon mitigation, with the option to install an active system later if needed.

Radon Objectives and Strategies

Radon Testing Objectives

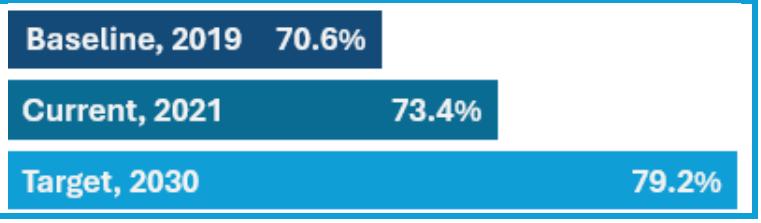
1.13	**A.** By 2030 **increase** radon testing in owner-occupied homes. (BRFSS)	
	B. By 2030 **increase** radon testing in rental properties. (BRFSS)	

[25] https://www.epa.gov/radon/epa-map-radon-zones
[26] https://www.epa.gov/radon/health-risk-radon#:~:text=For%20smokers%20the%20risk%20of,a%201%2C000%20for%20never%20smokers
[27] https://www.maine.gov/dhhs/mecdc/services/testing-services/radon
[28] https://www.mainelegislature.org/legis/statutes/14/title14sec6030-D.html
[29] https://www.mainelegislature.org/legis/statutes/20-A/title20-Asec4013.html

Radon Testing Strategies

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

Radon Mitigation Objective

1.14	By 2030 **increase** the number of households that install a radon mitigation system when they receive a high radon test result. (MTN)	

Radon Mitigation Strategies

- Educate the public about the importance of using registered radon mitigators
- Reduce financial barriers to installing radon mitigation systems in buildings (including homes, schools, etc.) that have elevated radon levels

Arsenic is an element that, like radon, can also not 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.[30] Approximately 50 percent of homes in Maine use well water, and 1 in 10 wells in Maine have high levels of arsenic. Whether testing indicates the need for a water treatment system or not, if a home relies on well water, the recommendation is to test the water every five years.[31] If testing reveals high levels of arsenic, the recommendation is to immediately stop drinking the water and use an alternative source until a treatment system can be installed. Arsenic is in the ground, so it can change based on the season, or because of things like earthquakes. Continued testing is the best way to know how much arsenic is in well water. The strategies below outline barriers to reducing testing and mitigation of arsenic.

For homes that rely on well water, it is recommended to test the water every five years.

[30] 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.

[31] https://www.maine.gov/dhhs/mecdc/environmental-health/eohp/wells/mewellwater.htm

Arsenic Objective and Strategies

Arsenic Objective

1.15	By 2030 **increase** the percentage of private wells tested for arsenic. (MTN)	Baseline, 2019 52.0% Current, 2021 56.1% Target, 2030 61.9%

Arsenic Strategies

- Educate Mainers about arsenic and the importance of testing well water for carcinogens
- Connect low-income individuals with free arsenic tests
- Educate landlords about the requirement to test buildings for arsenic and disclose results to tenants
- Collect, analyze, and present data about arsenic testing and conduct evaluations to address barriers and limitations
- Promote Maine State Housing's Arsenic Abatement Program for low-income homeowners

Tobacco Use

Tobacco[32] use is the leading preventable cause of cancer and cancer related deaths.[33] It is known to cause 12 different types of cancer and is responsible for 25 percent of all cancers and 30 percent of all cancer deaths in the U.S. (see Figure 13).[34] 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. Thirdhand smoke, the residue of tobacco smoke that lingers on surfaces after smoking, poses an increased risk of developing cancer. Smokeless tobacco, including chewing tobacco and snuff, can cause cancers in the mouth as well as in the esophagus and pancreas.

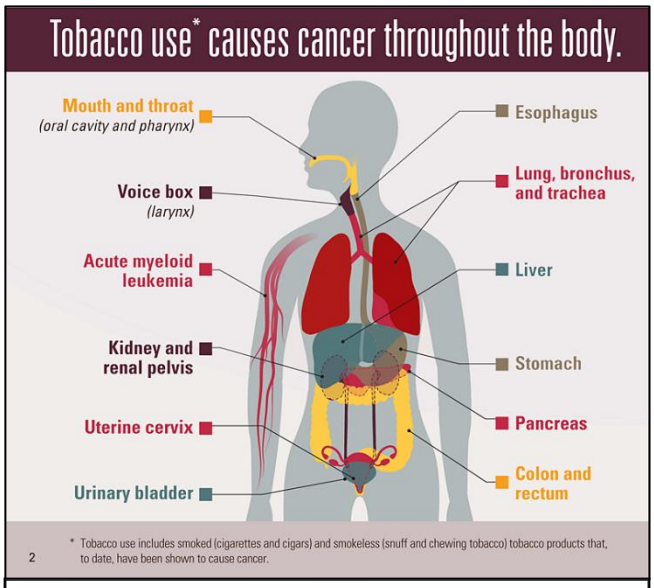


Figure 13: Cancers associated with tobacco use

According to the U.S. Surgeon General, there is no safe level of exposure to tobacco smoke, and smoking can cause cancer almost anywhere in the body. If no one in the U.S. smoked, one in three cancer deaths could be prevented.

Researchers are still learning about how using e-cigarettes (also referred to as vapes or vape pens), 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.[35]

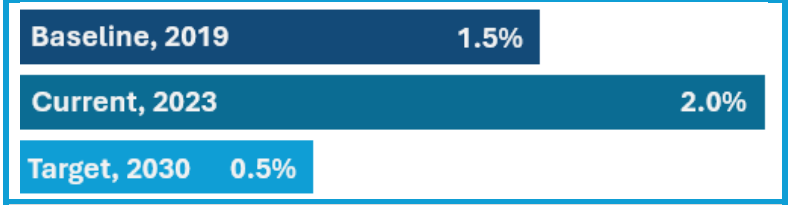
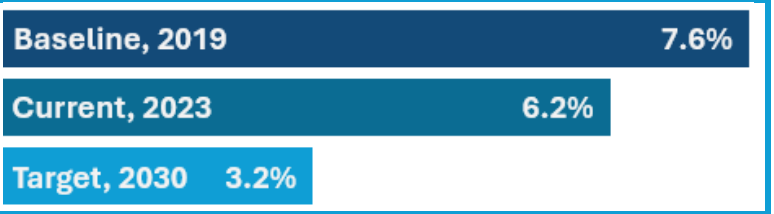
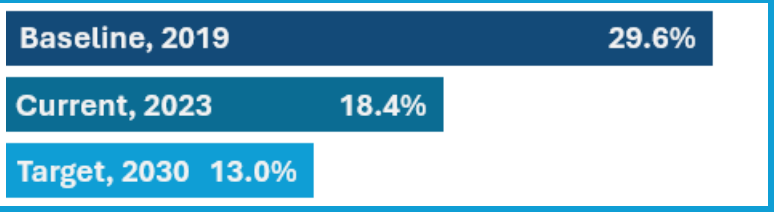
Studies show that if we can prevent youth from using tobacco products, it is unlikely they will ever start. Supporting policies and programs aimed at preventing youth and young adults from starting to use tobacco, helping people quit, and reducing exposure to secondhand and thirdhand smoke, all help in preventing cancer. Nearly 70 percent of current smokers want to quit, but over 40

[32] References to tobacco in this document refer to commercial tobacco use, not the sacred and traditional tobacco used by Indigenous communities.
[33] https://www.cdc.gov/lung-cancer/
[34] https://www.cancer.org/content/dam/CRC/PDF/Public/8345.00.pdf
[35] 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 https://pubmed.ncbi.nlm.nih.gov/32253264/

percent do not receive advice on quitting from a healthcare provider.[36] Quitting tobacco is hard and may take many tries to be successful, but each quit attempt is helpful practice in quitting for good.

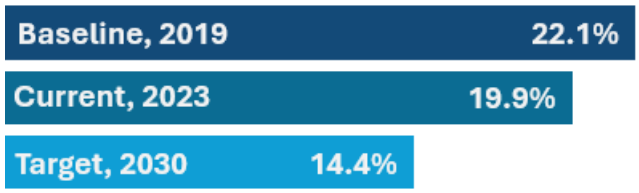
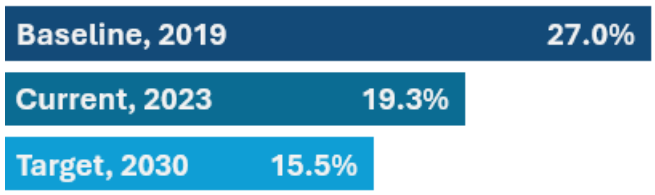
We know that some populations have higher rates of tobacco use, putting them at even greater risk for cancer. Tobacco advertising targets groups that are more likely to use and become addicted to tobacco including: youth, young adults, pregnant women, LGBTQIA+, rural, and immigrant populations. It is important to include culturally appropriate prevention efforts with those groups who are at the highest risk of using tobacco.

Tobacco Objectives and Strategies

Youth Tobacco Use Objectives		
1.16	By 2030 **reduce** the percentage of youth that smoke cigarettes. (MIYHS)	A. Middle School  B. High School 
1.17	By 2030 **reduce** the percentage of 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. (MIYHS)	A. Middle School  B. High School 

[36] https://www.hhs.gov/sites/default/files/2020-cessation-sgr-consumer-guide.pdf

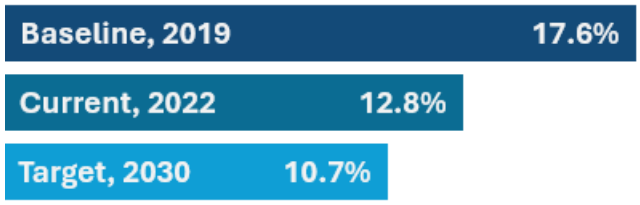
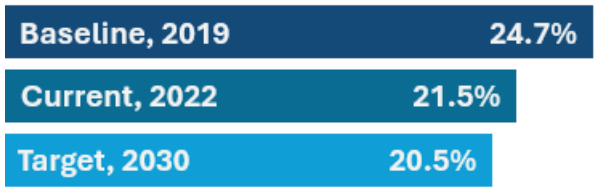
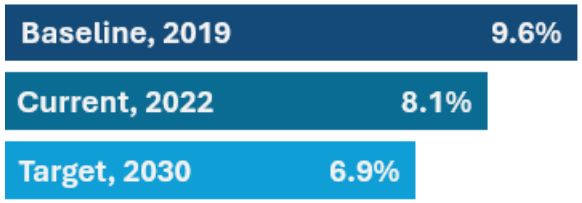
Youth Tobacco Use Objectives Continued

1.18	By 2030 **reduce** the percentage of Maine youth that are exposed to environmental tobacco smoke. (MIYHS)	A. Middle School  B. High School 

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 any of the available resources such as: My Life My Quit, and in-person treatment options in some schools
- Ensure culturally appropriate tobacco treatment services and resources are available for vulnerable populations such as: LGBTQIA+, Indigenous peoples, and immigrants
- Increase the availability of in-person tobacco treatment in schools
- Conduct statewide youth targeted mass-media counter marketing campaigns
- Increase taxes on cigarettes and other tobacco products to deter youth from starting
- Support a statewide flavor ban on all 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 efforts to reduce tobacco sales to underage youth through retail tobacco inspection and online sales
- Promote and educate on the dangers of secondhand and thirdhand smoke

Adult Tobacco Use Objectives

1.19	By 2030 **reduce** the percentage of Maine adults that smoke cigarettes. (BRFSS)	
1.20	By 2030 **reduce** the percentage of Maine adults that report currently using any tobacco products (cigarettes, smokeless tobacco, e-cigarettes, or other tobacco products). (BRFSS)	
1.21	By 2030 **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)	

Adult Tobacco Use Strategies

- Assist adults using tobacco to find help with quitting using the Maine QuitLink, and 1-800-QUIT-NOW
- Ensure culturally appropriate tobacco treatment services and resources are available for vulnerable populations such as: LGBTQIA+, Indigenous peoples, and immigrants
- Implement policies prohibiting tobacco use in multiunit housing and rental properties, hospitals, behavioral health settings, and colleges
- Enforce the law banning 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

MAINE QUITLINK.COM 1-800-QUIT-NOW

Ultraviolet (UV) Radiation

The rate of new cases of melanoma, a very serious form of skin cancer, is much higher in Maine than in other parts of the U.S. This is a result of two factors: most people in Maine identify as Caucasian (nearly 95 percent) and are therefore at higher risk of skin cancer; and many may not take steps to protect themselves from the sun's harmful rays. In fact, according to the 2023 Maine Integrated Youth Health Survey, 24.6 percent of high school students do not use sunscreen.[37]

Some people mistakenly believe that using a tanning bed or an indoor tanning device to get a base tan will prevent sunburn.[38] Using an indoor device is not recommended as it can increase the risk of developing melanoma and non-melanoma skin cancer.[39] 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.

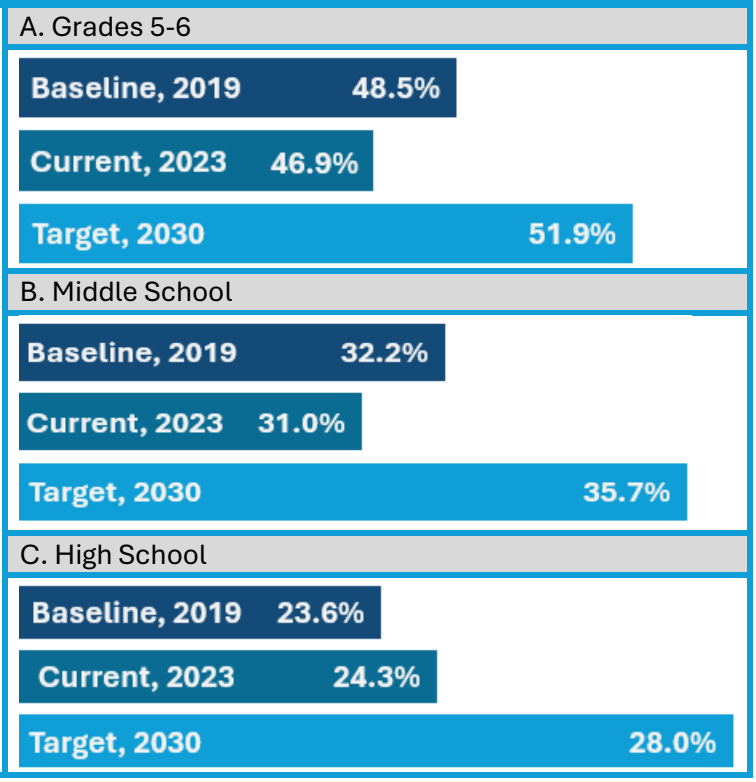
The American Academy of Dermatology recommends using a broad-spectrum sunscreen with a SPF of 30 or higher, applied every two hours, even on cloudy days.

It's important to remember that any darkening of skin color indicates damage – including a tan. The skin's way of protecting itself is to increase pigment around its cells. Once the tan is visible, the damage has already occurred. In fact, damage can happen even if the skin does not change color. Although people of any skin color can burn and get skin cancer, people with lighter skin and those with a higher number of moles have a higher risk.[40]

[37] https://www.maine.gov/miyhs/
[38] https://www.aad.org/public/diseases/skin-cancer/surprising-facts-about-indoor-tanning
[39] https://www.aad.org/media/stats-indoor-tanning
[40] https://www.cancer.org/cancer/types/melanoma-skin-cancer/causes-risks-prevention/risk-factors.html#:~:text=The%20risk%20of%20melanoma%20is,easily%20are%20at%20increased%20risk.

UV Radiation Objectives and Strategies

Youth Sunscreen Use Objective

1.22	By 2030 **increase** the percentage of youth that use a SPF of 15* or higher when outside for more than one hour on a sunny day. (MIYHS)	

*** The objective above indicates a SPF of 15 or higher on a sunny day because this is the question that is asked in the Maine Integrated Youth Health Survey. The American Academy of Dermatology recommends using a broad-spectrum sunscreen with a SPF of 30 or higher, applied every two hours, even on cloudy days.[41]**

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 daycare centers and school-based educators to increase access to (and increase use of) sunscreen

[41] https://www.aad.org/public#

Youth Indoor Tanning Objective

1.23	By 2030 **reduce** the percentage of youth that use indoor tanning devices. (MIYHS)	A. Middle School Baseline, 2019 4.0% Current, 2023 3.6% Target, 2030 2.3% B. High School Baseline, 2019 8.1% Current, 2023 4.7% Target, 2030 2.8%

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

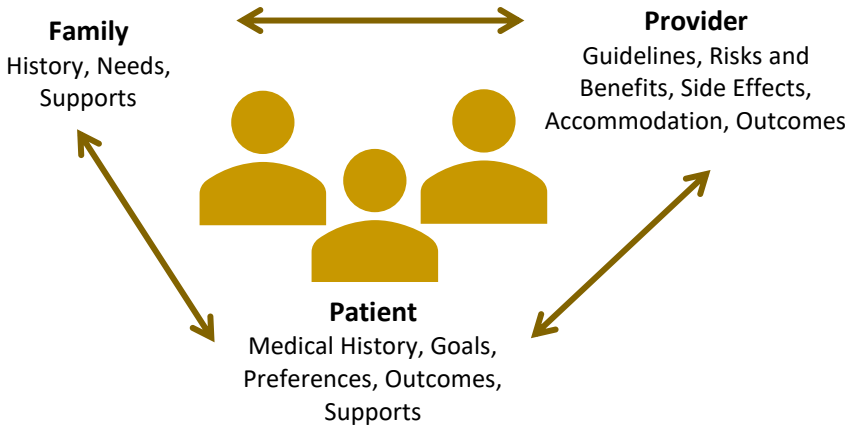
GOAL 2 – Screening: Increase Evidence-Based Cancer Screenings

Screening regularly for cancer can prevention cancer and/or find it early when it's easier to treat.

Screening is a foundation of cancer control. Screening for cancer helps find it early, which means treatment can begin sooner rather than later. It can also prevent cancers like cervical and colorectal by finding and removing cells/tissue before they can become cancer. Several professional groups have developed screening guidelines on the types of screening available, the best age to start, and screening frequency. These groups include the U.S. Preventive Services Task Force (USPSTF), and the American Cancer Society (ACS) as well as specialist groups (e.g., surgeons, radiologists, pathologists, family practitioners). The Maine CDC promotes USPSTF recommendations as these are the ones insurance companies follow. (See Appendix C for the USPSTF and ACS guidelines.)

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 (see Figure 14). This helps both parties learn more about the different screening options. Screening guidelines are generally recommendations for a typical asymptomatic adult. Patients should discuss their medical history, family history, and/or genetics with their health-care providers. This information can help a healthcare provider to share in the decision-making process such as different screening options, time for first screening, or shortening the time between screenings. Screening guidelines do change as researchers learn more, and it is important for patients to talk with their providers about the best screening plan for them.

Figure 14. Shared Decision-Making Process



Breast Cancer

Breast Cancer Screening Objectives		
2.1	By 2030 **increase** breast cancer screening among eligible adults based on current U.S. Preventive Services Task Force guidelines. (BRFSS)	Baseline, 2018 74.9% Current, 2022 73.6% Target, 2030 81.0%
2.2	By 2030 **reduce** the rate of new cases of female breast cancer diagnosed as late stage per 100,000 population. (MCR)	Baseline, 2016-2018 38.9 Current, 2019-2021 41.2 Target, 2030 36.3

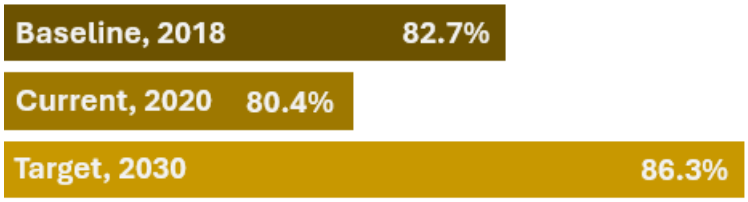
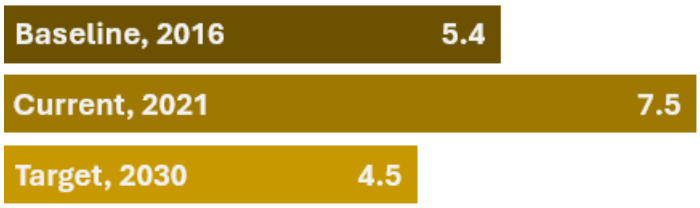
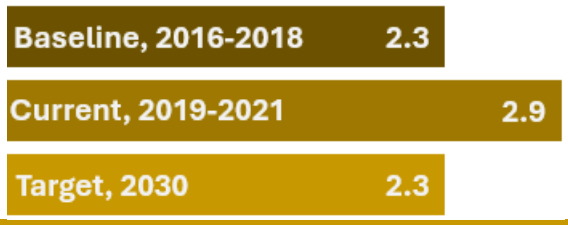
Breast Cancer Screening Strategies

- Partner with health-care providers, health systems, insurers, and MaineCare to increase the 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 is 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 a 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

This plan has added an objective about eliminating cervical cancer by reaching and maintaining an incidence rate below 4 per 100,000 people. This follows the World Health Organization's 2018 Cervical Cancer Elimination Initiative.[42] According to the initiative, elimination of cervical cancer can be reached by promoting the Human Papillomavirus (HPV) vaccine completion by the age of 15, encouraging cervical cancer screening, and ensuring pre-cancers found when screening are treated, and invasive cancer is managed.

Cervical Cancer Screening Objectives		
2.3	By 2030 **increase** cervical cancer screening among eligible adults based on current U.S. Preventive Services Task Force guidelines. (BRFSS)	
2.4	By 2030 **reduce** the incidence of cervical cancer per 100,000 population. (MCR) (Ultimately aiming for an elimination at a rate of 4.0 per 100,000)	
2.5	By 2030 **reduce** the rate of new cases of cervical cancer diagnosed as late stage per 100,000 population. (MCR)	

In 2025, the U.S. Food and Drug Administration approved a prescription at-home self-collection device for cervical cancer screening in individuals aged 25-65 at average risk.

[42] https://www.who.int/initiatives/cervical-cancer-elimination-initiative

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 the 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 a 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

Colorectal Cancer Screening Objectives		
2.6	By 2030 **increase** colorectal cancer screenings among eligible adults based on current U.S. Preventive Services Task Force guidelines (including stool-based tests, colonoscopy, sigmoidoscopy, or CT colonography). (BRFSS)	Baseline, 2022 72.2% Current, 2022 72.2% 2030 76.6% Baseline represents the 2022 change to begin screening at 45.
2.7	By 2030 **reduce** the rate of new cases of colorectal cancer diagnosed as late stage per 100,000 population. (MCR)	Baseline, 2016-2018 20.4 Current, 2019-2021 20.7 Target, 2030 18.6

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 to a general audience or tailored with the intent of reaching 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

Lung Cancer Screening Objectives

2.8	By 2030 **increase** lung cancer screenings among eligible adults based on current U.S. Preventive Services Task Force guidelines. (BRFSS)	Baseline, 2019 18.1% Current, 2022 14.1% Target, 2030 15.2%
2.9	By 2030 **monitor** shared decision-making among adults who have received a low dose computed tomography (LDCT) screening. (BRFSS)	Baseline, 2019 19.2% Current, 2021 24.5% Monitor
2.10	By 2030 **reduce** the rate of new cases of lung cancer (per 100,000 population) diagnosed as late stage. (MCR)	Baseline, 2016-2018 48.4 Current, 2019-2021 42.2 Target, 2030 38.7
2.11	By 2030 **reduce** the proportion of late-stage lung cancer. (MCR)	Baseline, 2016-2018 68.2% Current, 2019-2021 64.3% Target, 2030 58.6%

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

The PSA test for routine prostate cancer screening for the general population is no longer recommended by most organizations. This is due to potential false positives, over diagnosis, and over treatment.[43] The current recommendation is to talk with your provider about the risks and benefits of testing to make an informed decision. For more information for both patients and health care providers, Talk to Nathan[44] is a virtual interactive conversation about prostate screening and treatment.

Prostate Cancer Screening Objectives		
2.12	By 2030 **reduce** the incidence of prostate cancer per 100,000 population. (MCR)	Baseline, 2016 84.1 Current, 2021 111.6 Target, 2030 100.4
2.13	By 2030 **reduce** rate of new cases of prostate cancer diagnosed as late-stage per 100,000 population. (MCR)	Baseline, 2016-2018 23.9 Current, 2019-2021 26.2 Target, 2030 23.6

[43] https://www.cancer.gov/types/prostate/patient/prostate-screening-pdq#_35

[44] https://www.cdc.gov/prostate-cancer/talk-to-nathan/index.html#:~:text=For%20all%20men&text=Talk%20to%20Nathan%20about%20Prostate,decide%20whether%20to%20get%20screened.&text=Talk%20to%20Someone%20about%20Prostate,your%20doctor%20about%20treatment%20options.

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 so 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 can 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.[45] Nationally, clinical trial participation is low at approximately five percent.[46] 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 clinical trial participation in Maine are 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

[45] https://www.nccn.org/patientresources/patient-resources/nccn-foundation/news/newsdetails?NewsId=4962
[46] https://journals.sagepub.com/doi/10.1177/20552076211067658

Treatment Objective

Cancer Treatment at Accredited Hospitals Objective		
3.1	Monitor the number of patients treated at accredited hospitals and oncology practices in Maine. (MCR)	**Baseline, 2019** 83.6% **Current, 2021** 86.5% **Monitor**

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
- Create and disseminate clinical trial information designed specifically for pediatrics, adolescents and young adults, geriatrics, 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
- Broaden access through telehealth and coordinated care efforts
- Ensure culturally competent care to reduce disparities in cancer treatment
- Prioritize equity and inclusion in care strategies

GOAL 4 – Survivorship: Improve the Quality of Life for Cancer Survivors

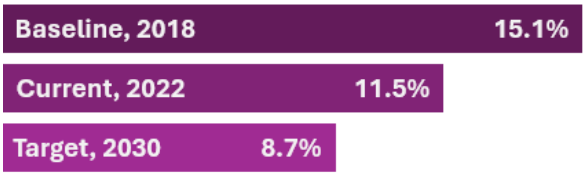
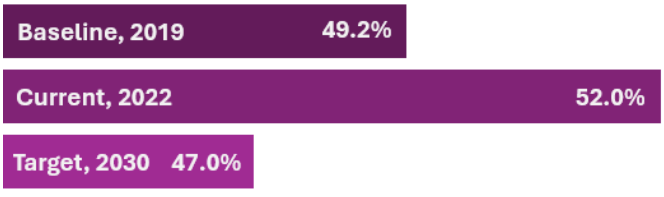
A cancer patient becomes a survivor on the day of diagnosis through the rest of their life. The number of cancer survivors living in the U.S. continues to increase each year because of advances in early detection practices and treatment as well as the natural aging process. According to the American Cancer Society, as of January 1, 2025, there are about 97,300 cancer survivors in Maine.[47] 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 U.S.[48]

Exercise and healthy food are medicine for cancer survivors.

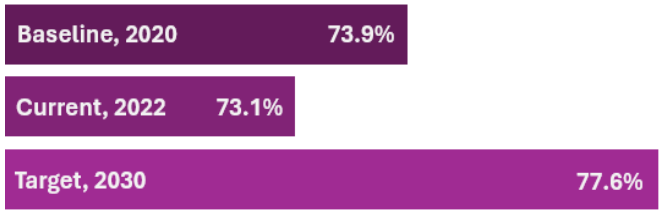
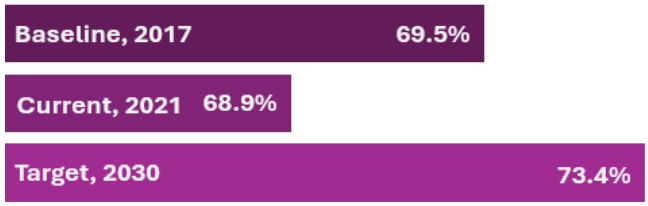
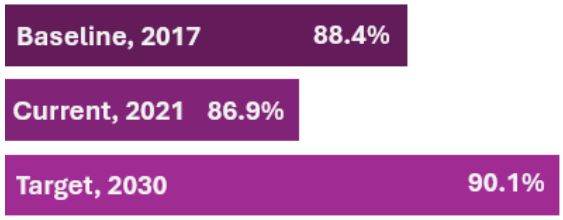
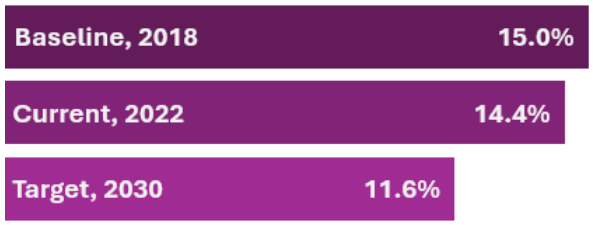
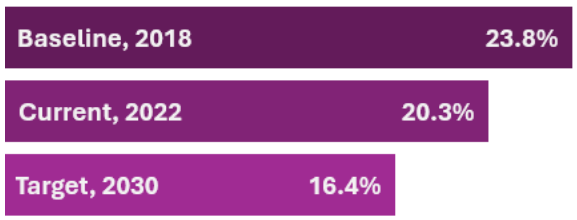
Maine has a rich history of addressing cancer survivorship issues and has many supports across the state for survivors. In 2019, a group of community cancer resource centers formed the Association of Maine Cancer Support Centers to enable them to collaborate across the state. These centers have missions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

Maine CDC updated a Cancer Survivorship Data Brief in 2023.[49] The data brief focuses on some of the issues faced by cancer survivors and provides an opportunity to identify areas to improve the health and wellness of cancer survivors in Maine.

Survivorship Objectives

Survivorship Health Outcomes Objectives		
4.1	By 2030 **reduce** the number of survivors using tobacco. (BRFSS)	
4.2	By 2030 **reduce** the number of survivors using alcohol. (BRFSS)	

[47] American Cancer Society. Cancer Treatment and Survivorship Statistics, 2025.
[48] 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
[49] https://www.maine.gov/dhhs/mecdc/sites/maine.gov.dhhs.mecdc/files/2023%20Cancer%20Survivorship%20Data%20Brief.pdf

Survivorship Health Outcomes Objectives Continued		
4.3	By 2030 **increase** the percentage of adult cancer survivors who participate in enough aerobic and muscle strengthening exercises to meet guidelines. (BRFSS)	
4.4	By 2030 **increase** the proportion of survivors who consume fruits one or more times per day. (BRFSS)	
4.5	By 2030 **increase** the proportion of survivors who consume vegetables one or more times per day. (BRFSS)	
4.6	By 2030 **reduce** the number of survivors who experience poor mental health days. (BRFSS)	
4.7	By 2030 **reduce** the number of survivors who experience poor physical health days. (BRFSS)	

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 is a team-based approach to care. It is patient-centered, family-focused, and improves a person's quality of life. At any age, at any stage from diagnosis through treatment, the palliative care team can address medical, physical, emotional, social, and spiritual needs. This team-based approach helps the patient manage pain and symptoms in all aspects of treatment. The palliative care team does this by anticipating, preventing, and treating suffering caused by a medical illness, a physical injury, or other limiting health condition. (See Figure 15 for course of illness care.) They can facilitate patient choices by discussing a patient's goals for treatment, treatment options, advanced care plans, and when appropriate, hospice care. Palliative care should be offered to anyone diagnosed with a serious illness and be part of every care plan.

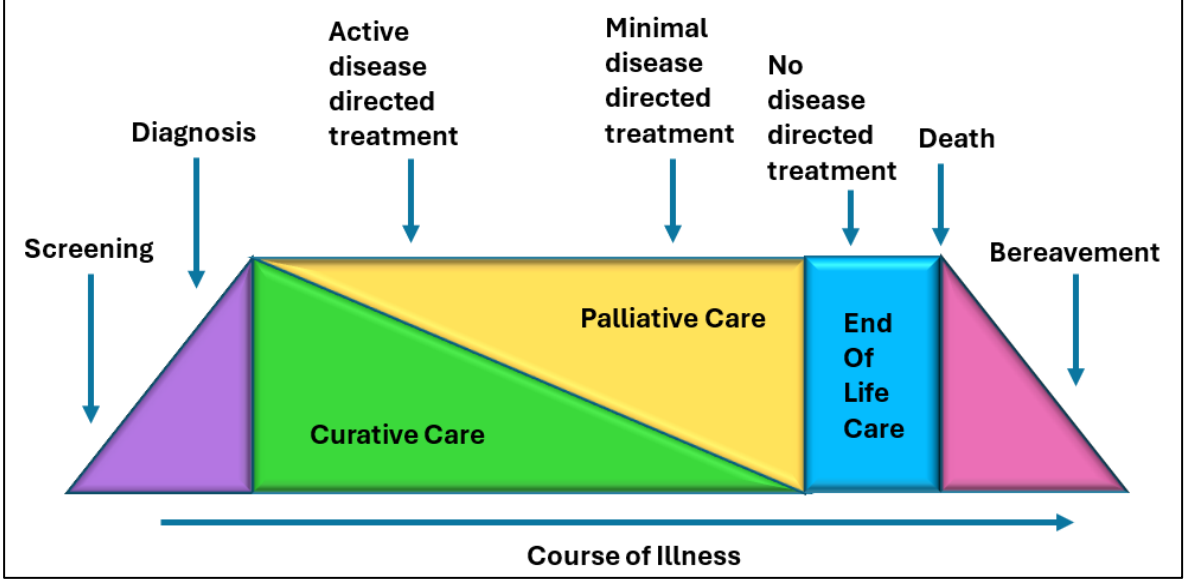
Everyone with a serious illness should be offered palliative care at the time of diagnosis.

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 2024 Center to Advance Palliative Care reported there are approximately 76 certified prescribing palliative care providers in Maine. This number is not enough to meet the needs of Maine's cancer patients. To address this lack of services, the American Cancer Society-Cancer Action Network and the Maine Hospice Council co-authored the legislation that established the *Palliative Care and Quality of Life Interdisciplinary Advisory Council* in 2015. This Council works to improve the quality and delivery of patient-centered, family-focused care in Maine.

The palliative care workforce, like all healthcare 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 should expand to reach underserved and disenfranchised communities and populations in rural communities.

There is much work ahead to achieve the vision of providing more palliative care services to more people across the state. Ongoing education with policymakers, providers, and the public about the role and value of palliative care is needed. As an important step to increasing palliative care services, healthcare providers will need to have their services covered by insurance companies including Medicaid and Medicare. Only then will there be an increase in palliative care services in Maine.

Figure 15. Palliative and Hospice Care and the Course of Illness

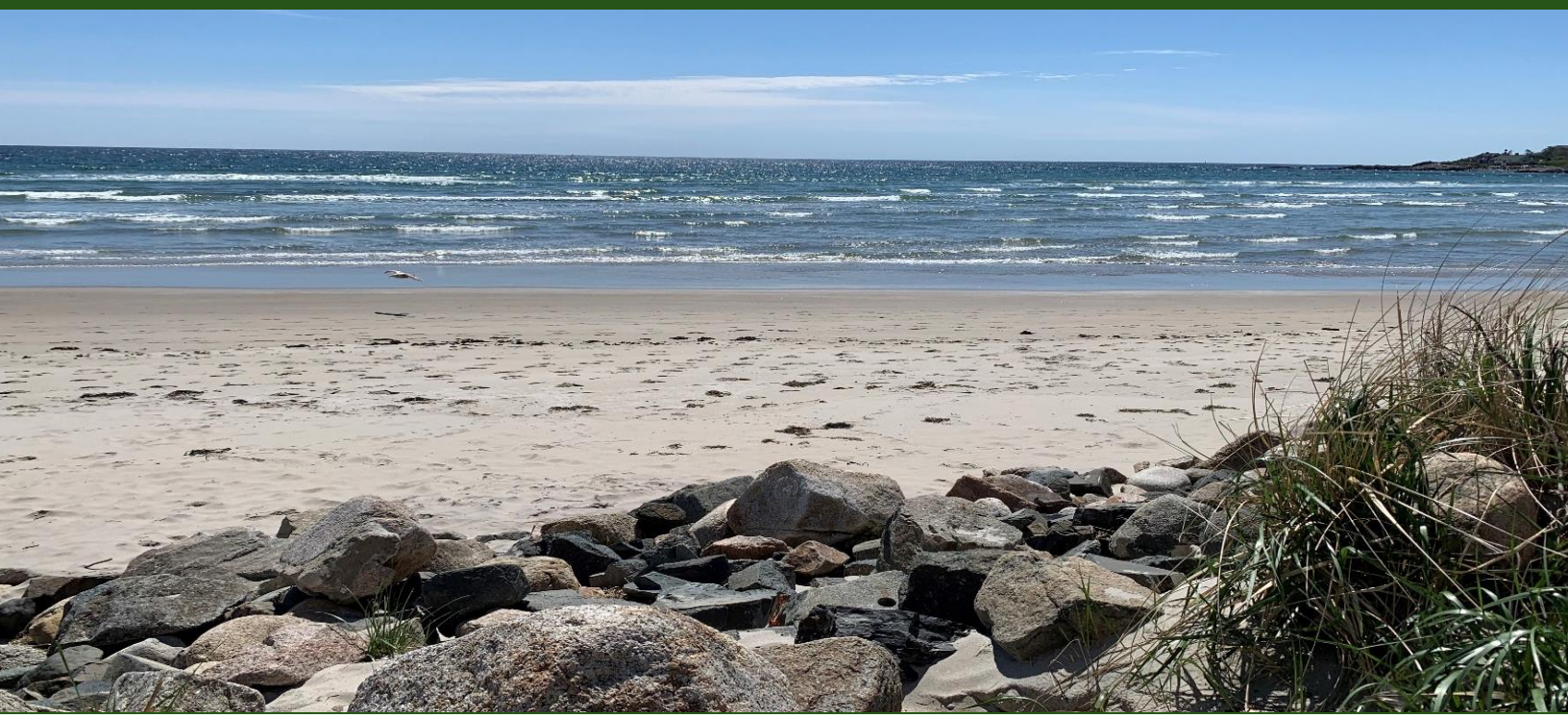


Palliative Care Objectives

Palliative Care Objectives		
5.1	By 2030 continue to **increase** the number of hospital-based palliative care programs in Maine. (2022 Palliative Care in Maine Study)	Baseline, 2022 39.0% Current, 2022 39.0% Target, 2030 42.2%
5.2	By 2030 continue to **increase** the number of hospice-based palliative care programs in Maine. (2022 Palliative Care in Maine Study)	Baseline, 2022 17.0% Current, 2022 17.0% Target, 2030 18.7%

Palliative Care Strategies

- Enhance data reporting to ensure better quality reporting for Maine
- Continue to increase awareness and understanding of the benefits of palliative care, among patients, families, providers, and community members
- Continue to incorporate palliative care as part of the evidence-based standard of care
- Continue implementation of goals of care conversations
- Continue to increase the use of interdisciplinary team-based (including patient and family) palliative care
- Continue to leverage innovation and technology to increase access to palliative care services
- Continue to provide support to enable palliative care teams to provide remote consultations to rural hospitals and federally qualified health centers, addressing key disparities in access to palliative care
- Incorporate essential components of palliative care across the continuum of MaineCare benefits
- Add a palliative care module to the state Behavioral Risk Factor Surveillance System (BRFSS) questionnaire to better understand palliative care delivery from the consumer perspective
- Continue to educate state health professional licensure and continuing education requirements entities to include a minimum number of hours of instruction in both pain/symptom management skills and serious illness communication skills, with particular attention to best practices in equitable care
- Promote the state-level awareness and messaging campaign to educate the public and providers on what palliative care is and who can benefit



GOAL 6 – End-of-Life Care: Ensure Timely Access to High-Quality End-of-Life Support for Cancer Patients

Hospice care is a philosophy of care that could be delivered anywhere. It's a way of looking at care for people, and, in its true sense, hospice is not attached to dollars, although it is often associated with the Medicare defined benefit that provides palliative care at the end of life. Maine has made significant progress expanding the use of hospice care in the state. The 2023 America's Health Rankings report based on 2020 data, ranked Maine 9th in the U.S. for hospice care. The report also indicated that 52.9 percent of Medicare deaths happened while in hospice. Hospice care services in Maine have the same workforce challenges that limit palliative care services in the state which in turn impacts the workforce that supports end-of-life care.

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 anyone nearing the end of life. The coverage also provides support to family members and loved ones, including bereavement care for up to one year after the death. Hospice can be delivered anywhere: in a person's home, wherever that may be; in a hospital; in an inpatient hospice facility; in a long-term care facility; or in a skilled nursing home. Many patients with end-stage cancer can benefit from timely hospice enrollment to maximize quality of life and provide support for their families. Coverage of hospice through Medicaid is often limited to those with a life expectancy of six months or less. The earlier interaction with palliative care ensures a smoother transition to hospice care later in an illness.

Having an advanced directive in place **before** a person gets sick makes the discussion about planning for the end-of-life much easier. An advanced directive is a legal document that allows individuals to communicate their wishes about their medical care if they become unable to make decisions for themselves. This also allows cancer patients and their families to have the information needed to support decisions being made throughout their cancer journey.

End-of-Life Care Objective

End-of-Life Care Objective		
6.1	By 2030 at a minimum, **maintain** hospice utilization in Maine. (America's Health Rankings – Senior Report)	**Baseline, 2024** 52.9% **Current, 2024** 52.9% **Target, 2030** 52.9%

End-of-Life Care Strategies

- Continue to ensure individualized care plans tailored to each patient's unique circumstances and preferences
- Continue to increase awareness and understanding of high-quality hospice care among patients, providers, policy makers and community members
- Promote education for healthcare professionals in both adult and pediatric hospice care to ensure better care for patients at the end of life
- Continue to work with insurance companies to cover effective pain and symptom management including non-pharmacological techniques as well as medication
- Continue to educate caregivers about the bereavement support offered through hospice
- Continue to ensure continuity of care between various settings such as home, hospital, hospice facility, or other
- Continue to increase high quality hospice care to those populations who are underserved and disenfranchised as well as those who live in highly rural areas

Maine Cancer Plan 2021-2030 Metrics

Performance Measures			Baseline (2021)	Current (2025)	U.S. Compare	2030 Target	Data Source
Goal 1 – Reduce cancer risk through evidence-based strategies							
Alcohol Objectives							
1.1	Reduce the percentage of youth who report using alcohol in the past 30 days.	A. Middle School	**4.0%** (3.6-4.4) 2019	**4.8%** (4.3-5.3) 2023	N/A	**3.6%**	MIYHS
		B. High School	**22.9%** (21.8-24.0) 2019	**20.5** (19.2-21.7) 2023	**22.7%** (21.1-24.4) 2021 (YRBS)	**18.8%**	
1.2	Reduce the percentage of youth who had five or more alcoholic drinks on at least one day in the last 30 days.	A. Middle School	**1.3%** (1.1-1.5) 2019	**1.8%** (1.6-2.1) 2023	N/A	**0.4%**	
		B. High School	**32.7%** (31.1-34.2) 2019	**36.1%** (34.5-37.6) 2023	**10.5%** (9.3-11.8) 2021 (YRBS)	**28.1%**	
1.3	Reduce the percentage of Maine adults (ages 18 and older) at-risk from heavy alcohol use in past month.		**8.9%** (7.9-9.8) 2019	**8.2%** (7.4-8.9) 2023	**6.1%** (no CI) 2023	**6.3%**	BRFSS
1.4	Reduce the percentage of Maine adults (ages 18 and older) who binge alcohol use in the past month.		**17.0%** (15.7-18.3) 2019	**15.0%** (14.0-16.1) 2023	**15.2%** (no CI) 2023	**13.4%**	
1.5	Reduce the percentage of Maine adults (ages 18 and older) with any alcohol use in the past month.		**57.0%** (55.5-58.5) 2019	**55.5%** (54.1-56.8) 2023	**52.8%** (no CI) 2023	**52.0%**	
HPV Objectives							
1.6	Increase the percentage of adolescents aged 9-12 years old who have initiated the HPV vaccination series.		**19.6%** 2024	**19.6%** 2024	N/A	**25.0%**	MIP
1.7	Increase the percentage of adolescents aged 13-17 years old who have completed the HPV vaccination series.		**63.5%** (45.7-59.4) 2020	**61.2%** (55.0-67.1) 2023	**61.4%** (59.9-63.0) 2023	**68.2%**	NIS-Teen
Obesity Objectives							
1.8	Increase the percentage of youth who consume 100% fruit juice, fruits, and/or vegetables five or more times a day:	A. Grade 5-6	**46.6%** (44.5-48.6) 2019	**46.8%** (44.2-49.3) 2023	N/A	**51.6%**	MIYHS
		B. Middle school	**20.9%** (19.9-21.8) 2019	**18.9%** (18.0-19.9) 2023	N/A	**22.7%**	
		C. High school	**15.2%** (14.3-16.0) 2019	**14.2%** (13.5-14.9) 2023	N/A	**19.0%**	

Performance Measures Table Definitions

AHR-SR – America's Health Rankings – Senior Report
BRFSS – Behavioral Risk Factor Surveillance System
ImmPact – Maine Immunization Information System
MCR – Maine Cancer Registry
MIP – Maine Immunization Program
MIYHS – Maine Integrated Youth Health Survey
MTN – Maine Tracking Network
PPCMS – 2022 Palliative Care in Maine Study
YRBS – Youth Risk Behavior Surveillance

Baseline established using the data available during the development of the 2021-2025 plan unless guidelines changed.

Performance Measures			Baseline (2021)	Current (2025)	U.S. Compare	2030 Target	Data Source
Obesity Objectives continued							
1.9	Increase the percentage of youth who are physically active for at least one hour per day during the past seven days:	A. Middle school	**25.5%** (24.6-26.3) 2019	**27.9%** (26.9-29.0) 2023	N/A	**34.6%**	MIYHS
		B. High school	**20.9%** (20.1-21.7) 2019	**24.0%** (23.1-24.9) 2023	N/A	**29.6%**	
1.10	Increase the percentage of adults who consume fruits one or more times per day.		**63.9%** (62.0-65.8) 2019	**65.0%** (63.7-66.3) 2021	**60.2%** (59.8-60.5) 2021	**68.6%**	BRFSS
1.11	Increase the percentage of adults who consume vegetables one or more times per day.		**87.1%** (85.7-88.5) 2019	**86.9%** (85.9-87.9) 2021	**79.3%** (79.0-79.6) 2021	**90.3%**	
1.12	Increase the percentage of Maine adults who participate in enough aerobic and muscle strengthening exercises to meet guidelines.		**20.2%** (18.8-21.5) 2019	**31.0%** (29.7-32.4) 2023	**30.4%** No CI 2023	**33.1%**	
Radon and Arsenic Objectives							
1.13	Increase radon testing in:	A. Owner-occupied structures.	**34.0%** (31.8-36.2) 2019	**38.6%** (36.4-40.7) 2021	N/A	**43.7%**	BRFSS (MTN)
		B. Non-seasonal residential rental properties.	**21.5%** (17.0-26.0) 2019	**23.5%** (19.2-27.8) 2021	N/A	**30.2%**	
1.14	Increase the number of households that install a radon mitigation system when they receive a high radon test result.		**70.6%** (61.4-79.8) 2019	**73.4%** (66.7-80.0) 2021	N/A	**79.2%**	
1.15	Increase the percentage of private wells tested for arsenic.		**52.0%** (49.1-54.8) 2019	**56.1%** (53.4-58.9) 2021	N/A	**61.9%**	
Tobacco Objectives							
1.16	Reduce the percentage of Maine youth that smoke cigarettes.	A. Middle school	**1.5%** (1.2-1.7) 2019	**2.0%** (1.7-2.3) 2023	**1.4%** (1.0-2.0) 2021 (YRBS)	**0.5%**	MIYHS
		B. High school	**7.1%** (6.6-7.5) 2019	**5.6%** (5.1-6.0) 2023	**4.3%** (3.8-4.8) 2021 (YRBS)	**2.9%**	
1.17	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	**7.6%** (6.9-8.3) 2019	**6.2%** (5.5-7.0) 2023	**6.6%** (5.6-7.8) 2021 (YRBS)	**3.2%**	MIYHS
		B. High school	**29.6%** (No CI) 2019	**18.4%** (17.3-19.4) 2023	**18.1%** (16.2-20.1) 2021 (YRBS)	**13.0%**	
1.18	Reduce the percentage of Maine youth that are exposed to environmental tobacco smoke:	A. Middle school	**22.1%** (20.8-23.3) 2019	**19.9%** (18.4-21.5) 2023	N/A	**14.4%**	MIYHS
		B. High school	**27.0%** (25.4-28.6) 2019	**19.3%** (18.2-20.5) 2023	N/A	**15.5%**	

Performance Measures			Baseline (2021)	Current (2025)	U.S. Compare	2030 Target	Data Source
Tobacco Objectives Continued							
1.19	Reduce the percentage of Maine adults that smoke cigarettes.		**17.6%** (16.4-18.8) 2019	**12.8%** (12.6-13.1) 2022	**13.4%** (13.2-13.7) 2021	**10.7%**	BRFSS
1.20	Reduce the percentage of Maine adults that report currently using any tobacco products (cigarettes, smokeless tobacco, e-cigarettes, or other tobacco products).		**24.7%** (22.6-26.7) 2019	**21.5%** (19.7-23.3) 2022	N/A	**20.5%**	
1.21	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.		**9.6%** (8.3-10.9) 2019	**8.1%** (6.9-9.3) 2022	N/A	**6.9%**	
Ultraviolet Radiation Objectives							
1.22	Increase the percentage of youth that use SPF of 15 or higher when outside for more than one hour on a sunny day:	A. Grade 5 & 6	**48.5%** (45.4-51.7) 2019	**46.9%** (44.6-49.2) 2023	N/A	**51.9%**	MIYHS
		B. Middle school	**32.2%** (30.0-34.4) 2019	**31.0%** (28.6-33.5) 2023	N/A	**35.7%**	
		C. High school	**23.6%** (22.0-25.1) 2019	**24.3%** (22.5-26.0) 2023	N/A	**28.0%**	
1.23	Reduce the percentage of youth who use indoor tanning devices.	A. Middle school	**4.0%** (3.3-4.7) 2019	**3.6%** (2.8-4.3) 2023	N/A	**2.3%**	MIYHS
		B. High school	**8.1%** (7.1-9.1) 2019	**4.7%** (3.9-5.4) 2023	N/A	**2.8%**	
Goal 2 – Increase evidence-based screening for all Mainers							
Breast Screening Objectives							
2.1	Increase breast cancer screening among eligible adults based on current U.S. Preventive Services Task Force guidelines.		**74.9%** (73.0-76.8) 2018	**73.6%** (71.8-75.4) 2022	**70.2%** (no CI) 2022	**81.0%**	BRFSS
2.2	Reduce the rate of new cases of female breast cancer diagnosed as late stage.		**38.9** per 100,000 (36.4-41.5) 2016-2018	**41.2** per 100,000 (38.7-43.9) 2019-2021	**41.9** per 100,000 (41.7-42.1) 2019-2021	**36.3** per 100,000	MCR
Cervical Screening Objectives							
2.3	Increase cervical cancer screening among eligible adults based on current U.S. Preventive Services Task Force guidelines.		**82.7%** (80.4-84.9) 2018	**80.4%** (78.1-82.7) 2020	**78.0%** (77.3-78.6) 2020	**86.3%**	BRFSS
2.4	Reduce the incidence of cervical cancer in Maine.		**5.4** per 100,000 (3.7-7.5) 2016	**7.5** per 100,000 (5.5-10.0) 2021	**7.4** per 100,000 (7.3-7.5) 2021	**4.5** per 100,000	MCR
2.5	Reduce the rate of new cases of cervical cancer diagnosed as late stage.		**2.3** per 100,000 (1.7-3.0) 2016-2018	**2.9** per 100,000 (2.2-3.8) 2019-2021	**3.7** per 100,000 (3.7-3.8) 2019-2021	**2.3** per 100,000	MCR
Colorectal Screening Objectives							
2.6	Increase colorectal cancer screening among eligible adults based on current U.S. Preventive Services Task Force guidelines (including stool-based tests, colonoscopy, sigmoidoscopy, or CT colonography). *Baseline represents the 2022 change to begin screening at 45.*		**72.2%** (70.5-73.8) 2022	**72.2%** (70.5-73.8) 2022	**73.3%** (72.7-74.0) 2022	**76.6%**	BRFSS

Performance Measures		Baseline (2021)	Current (2025)	U.S. Compare	2030 Target	Data Source
Colorectal Cancer Screening Objectives continued						
2.7	Reduce the rate of new cases of colorectal cancer diagnosed as late stage.	**20.4** per 100,000 (19.1-21.6) 2016-2018	**20.7** per 100,000 (19.5-22.0) 2019-2021	**21.7** per 100,000 (21.6-21.8) 2019-2021	**18.6** per 100,000	MCR
Lung Cancer Screening Objectives						
2.8	Increase lung cancer screening among eligible adults based on current U.S. Preventive Services Task Force guidelines.	**18.1%** (14.1-22.1) 2019	**14.1%** (11.6-16.7) 2022	**9.9%** (no CI) 2022	**15.2%**	BRFSS
2.9	Increase shared decision making among adults who have received low dose computed tomography (LDCT) screening.	**19.2%** (15.3-23.1) 2019	**24.5%** (19.8-29.4) 2021	N/A	†	BRFSS
2.10	Reduce the rate of new cases of late-stage lung cancer.	**48.4** per 100,000 (46.6-50.2) 2016-2018	**42.2** per 100,000 (40.6-43.8) 2019-2021	**33.0** per 100,000 (32.9-33.1) 2019-2021	**38.7** per 100,000	MCR
2.11	Reduce the percentage of late-stage lung cancer.	**68.2%** (66.8-69.6) 2016-2018	**64.3%** (62.8-65.7) 2019-2021	**67.7%** (62.8-65.7) 2017-2021	**58.6%**	MCR
Prostate Screening Objectives						
2.12	Reduce the incidence of prostate cancer.	**84.1** per 100,000 (78.4-90.3) 2016	**111.6** per 100,000 (105.3-118.2) 2021	**114.7** per 100,000 (114.2-115.2) 2021	**100.4** per 100,000	MCR
2.13	Reduce the rate of new cases of late-stage prostate cancer.	**23.9** per 100,000 (22.2-25.9) 2016-2018	**26.2** per 100,000 (24.4-28.1) 2019-2021	**22.1** per 100,000 (24.9-25.2) 2019-2021	**23.6** per 100,000	MCR
Goal 3 – Increase timely, high-quality, and evidence-based cancer treatment for all Mainers						
3.1	Monitor the number of patients treated at Commission on Cancer accredited hospitals in Maine.	**83.3%** (85.0-86.4) 2019	**87.9%** (87.3-88.6) 2021	N/A	†	MCR
Goal 4 – Improve the quality of life for cancer survivors in Maine						
4.1	Reduce the percentage of survivors using tobacco.	**15.1%** (12.5-17.7) 2018	**11.5%** (9.3-13.7) 2022	**11.6%** (11.0-12.1) 2022	**8.7%**	BRFSS
4.2	Reduce the percentage of survivors using alcohol.	**49.2%** (12.5-14.8) 2019	**52.0%** (13.1-15.5) 2022	**49.5%** (10.8-11.3) 2022	**47.0%**	
4.3	Increase the percentage of survivors who participate in enough aerobic and muscle strengthening exercises to meet guidelines.	**15.6%** (14.3-16.9) 2019	**14.7%** (13.7-15.7) 2023	**12.2%** (11.9-12.4) 2023	**17.2?**	
4.4	Increase the percentage of survivors who consume fruits one or more times per day.	**69.5%** (66.0-73.1) 2017	**68.9%** (66.2-71.6) 2021	**63.2%** (62.3-64.0) 2021	**73.4%**	
4.5	Increase the percentage of survivors who consume vegetables one or more times per day.	**88.4%** (86.0-90.9) 2017	**86.9%** (84.8-89.0) 2021	**82.0%** (81.3-82.8) 2021	**90.1%**	
4.6	Reduce the percentage of survivors with poor mental health days (past month >13 days).	**15.0%** (12.4-17.6) 2018	**14.4%** (11.9-16.9) 2022	**14.8%** (14.2-15.5) 2022	**11.6%**	
4.7	Reduce the percentage of survivors who have poor physical health days (past month >13 days).	**23.8%** (20.8-27.1) 2018	**20.3%** (17.6-23.1) 2022	**21.7%** (21.0-22.4) 2022	**16.4%**	

Performance Measures		Baseline (2021)	Current (2025)	U.S. Compare	2030 Target	Data Source
Goal 5 – Ensure all patients have comprehensive, high-quality palliative care throughout their cancer diagnosis and treatment						
5.1	Increase the percentage of hospital-based palliative care programs in Maine.	**39.0%** 2022	**39.0%** 2022	N/A	**42.2%**	PPCMS
5.2	Increase the percentage of hospice-based palliative care programs in Maine.	**17.0%** 2022	**17.0%** 2022	N/A	**18.7%**	
Goal 6 – Ensure timely access to high-quality end-of-life support for cancer patients						
6.1	At a minimum, maintain hospice utilization in Maine.	**52.9%** 2024	**52.9%** 2024	**46.7%** 2024	**52.9%**	AHR-SR

† Metric is for monitoring purposes only and no target is set
Targets were set by using a tool from Healthy People 2030 that calculates targets based on a 10 or 20 percent increase or decrease. Where the targets calculated by the tool didn't make sense with current data, exceptions were made on a case-by-case basis.

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 peer reviewed 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 provided by a team of medical professionals and is focused on delivering 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 medical option for an individual. The patient and providers balance personal history and preferences with medical advice to achieve a positive outcome and good quality of life.

RESOURCES

Cancer Data	• Maine Cancer Registry Reports • Maine Interactive Health Data • United States Cancer Statistics: Data Visualizations
Health Disparities	• American Cancer Society – The State of Cancer Disparities in the U.S. • National Cancer Institute, Cancer Health Disparities • National LGBT Cancer Network
Cancer Risk	• American Cancer Society CancerRisk360™ • CDC Cancer Risk Factors • National Cancer Institute Risk Factors for Cancer
Tobacco Use	• U.S. CDC Smoking and Tobacco Use Fast Facts • Vital Signs: Cancer and tobacco use • Maine QuitLink, My Life My Quit, and NO BUTS! Training
Obesity	• Maine Obesity Advisory Council • Obesity-Associated Cancer in Maine
Alcohol Use	• American Cancer Society - Alcohol Use and Cancer • National Cancer Institute - Alcohol and Cancer Risk
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 and Effectiveness | CDC • National HPV Vaccination Roundtable • Vaccines for Children Program
Screening	• Screenmaine.org • Cancer Screening Tests • 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 2023 • National Patient Navigator Roundtable • ManUptoCancer
Palliative Care	• Center to Advance Palliative Care • 2022 Prevalence of Palliative Care in Maine Study
Hospice Care	• Medicare Care-Compare Website • America's Health Rankings: Hospice Care in Maine

Appendix A – Listening Sessions and Summit Recommendation Summaries

1. Summary of Recommendations from the Listening Sessions

The recommendations emphasize equity, collaboration, cultural competence, and accessibility to address cancer-related disparities across Maine's diverse communities, with a focus on removing barriers and improving equity for BIPOC, LGBTQIA+, low-income, and rural populations. Highlights include several key recommendations across four primary goals: Prevention, Screening, Treatment, and Survivorship. For more details see the full report of the Maine Cancer Plan Community Engagement Report.

Prevention:

- Increase education and awareness using culturally competent CHWs, patient navigators, and healthcare providers.
- Improve coordination across public health systems by enhancing partnerships and developing collaborative funding opportunities.
- Utilize traditional and digital outreach methods to expand community engagement.
- Streamline environmental testing processes and provide financial support for remediation.
- Tailor strategies for specific communities, including youth-led initiatives for BIPOC populations and improved SOGI data collection for LGBTQIA+ individuals.

Screening:

- Enhance accessibility through mobile screening vans and free screenings, especially in underserved areas.
- Promote culturally competent care and improve outreach through CHWs, peer navigators, and community-based services.
- Increase public education and reduce stigma through inclusive messaging.
- Develop streamlined referral systems and ensure timely follow-up.
- Provide insurance-covered ride-share services and home test kits to alleviate transportation barriers.

Treatment:

- Expand telehealth services and coordinate care to reduce geographic and financial barriers.
- Promote culturally competent care through training and collaboration with trusted community partners.
- Increase access to palliative care, peer mentorship, and complementary therapies.
- Prioritize equity by addressing barriers faced by marginalized populations, including those with disabilities and incarcerated individuals.
- Advocate for insurance coverage of integrative care options and improve clinical trial accessibility.

Survivorship:

- Increase awareness of survivorship services through educational campaigns and tailored support.
- Strengthen peer support networks and collaborate with community organizations.
- Improve access to mental health and nutritional support services, especially in rural areas.
- Expand workforce capacity and train providers on culturally competent survivorship care.
- Ensure access to long-term resources, including palliative care and hospice services.

2. Summary of Cancer Plan Recommendations from the Cancer Plan Summit

Youth Prevention

- Objectives: No changes
- Themes of discussions
    - Concern about vaping and other commercial tobacco products
    - Making lifestyle recommendations accessible to young people (examples: healthy food, sunscreen)
    - Connections, mattering, loneliness, and mental health (youth and adults)
    - Telling the story of prevention: collect quantitative and qualitative data to show the value

Adult Prevention

- Objectives: No changes
- Priority strategies
    - Communications
    - Partnerships and collaborations, including cross-programming
- Other strategies (some new)
    - Public education – risks, harm reduction, stigmatization
    - Counter marketing
    - Support providers
    - Settings – without punishments
        - Employers
        - Housing, especially regarding tobacco and radon
        - Build on what exists – Healthy Homes, etc.
    - Mental health issues re: physical activity, alcohol
    - Food affordability and ties to local economies

Screening

- Objectives: Minor tweaks *(see complete notes from group discussions)*
- Priority strategies (some new)
    - Advocacy strategies to improve/expand insurance coverage (examples: mammogram and ultrasound)
    - Public education – guidelines and policies
    - Employer-focused strategies to support patients
    - Filling gaps in less common screening capacities
    - Communications and practical systems for transitioning from OB to primary care
    - Funding strategies
    - Community Health Worker (CHW) strategies, including navigators and liaison functions
    - Professional development and technical assistance (T/A)

    - Survivor screening
    - Education and accountability for updating our language (example: use of “women”, “girls”)
    - Data collection improvements, including BRFSS questions

Treatment (includes survivorship, palliative care, end of life support)

- Objectives: No changes
- Themes and key takeaways from discussions
    - Importance of including people (individuals and families) in the design and implementation of treatment initiatives
    - Maine’s insurance reimbursement model must include all aspects of treatment
- Priority strategies (some new) and other highlights
    - More emotional support resources
    - Include Community Health Workers (CHWs) as a focused strategy
    - Culturally appropriate messaging and education
    - Know our audience and who we are talking with
    - Do more to address the core issue of grief, which comes in many forms, including insurance coverage for grief-related supports and services
    - Care giver respite
    - Outpatient palliative care
    - Adopt-a-patient
    - Provider education
    - Less stigma if you don’t go to a COC
    - Be open to talking about cost savings of “supportive oncology care”

Appendix B – Areas of Continued Focus

The following were compiled with the assistance of ChatGPT. The topics below were not included as objectives in this plan due to lack of data and an evidence-based link to cancer. These topics are evolving and will continue to be monitored as new information emerges.

Adolescents and Youth Adults (AYA)

Cancer among the AYA population (which includes ages 15-39) are generally understudied creating prevention, treatment, and outcome challenges. Many survivors diagnosed with cancer during childhood often face long-term physical, psychological, and social challenges well into adulthood because of the disease and its treatment. Advances in therapy have significantly increased survival rates, but approximately two-thirds of survivors experience at least one chronic health condition later in life, such as cardiovascular disease, secondary cancers, or cognitive impairments.[50] The AYA population in Maine makes up about three percent of all new cancer cases diagnosed between 2011 and 2020. During this same time frame, the overall cancer rates among females appear to be higher than the male rates. Overall, cancer incidence rates among AYA have not significantly increased in Maine over the last two decades.[51]

BIPOC (Black, Indigenous, and People of Color)

People from minority groups—like Black, Hispanic, Asian, Native American, and other communities—may have a higher risk of getting certain cancers or dying from them. This can be because of things like lack of access to health care, not getting screened early, or differences in treatment. Language barriers, income, and discrimination can also make it harder to get good care. It's important to make sure everyone has the same chance to stay healthy and get the care they need. You can learn more from the American Cancer Society and the National Cancer Institute.

Cancer in Older Adults

Cancer is more common in older adults—people age 65 and up make up most new cancer cases and deaths. As we get older, our bodies change, and that can make cancer treatment more complicated. Older adults may have other health problems, be more tired, or have different goals for treatment than younger people. Doctors often use special health checkups, called geriatric assessments, to help decide the best care for older adults with cancer. To learn more, visit the National Cancer Institute's page on Age and Cancer Risk.

Disabilities

People with disabilities can get cancer just like anyone else, but they may face extra challenges. These can include trouble getting to doctor's appointments, not being screened for cancer on time, or not having health care that meets their needs. Health care providers should make sure care is easy to access and meets each person's needs. Some reasons identified by women include

[50] https://www.cancer.gov/types/childhood-cancers/late-effects-hp-pdq
[51] https://www.maine.gov/dhhs/mecdc/public-health-systems/data-research/vital-records/mcr/reports/documents/Maine%202023%20Annual%20Cancer%20Snapshot%20FINAL.pdf

encountering inaccessible facilities and equipment and having to focus on other health issues. You can find more information from the Centers for Disease Control and Prevention (CDC) and the American Cancer Society.

Environmental Toxins

There are many toxins that may cause cancer. The following covers only a handful of the many that are out there. Per- and polyfluoroalkyl substances or PFAS, often called "forever chemicals," are substances found in many everyday products that don't break down easily in the environment. These chemicals have been raising concerns about their potential link to cancer. Studies have found that people exposed to PFAS, often through contaminated drinking water, may face a higher risk of developing certain types of cancer.[52,53] Firefighters are routinely exposed to PFAS used in firefighting foams and water-resistant gear—which accumulate in their bodies and have been linked to elevated risks of various cancers.[54] The inhalation of smoke and other toxins emitted by burning items when fighting fires can also cause cancer. The National Firefighter Registry for Cancer, established by the 2018 Fire Fighter Cancer Registry Act and managed by NIOSH/CDC, aims to collect health, occupational, and exposure data from active, former, and retired US firefighters to better understand and ultimately reduce cancer rates in this profession.[55] Asbestos is another well-established human carcinogen: inhalation of microscopic asbestos fibers has been directly linked to serious cancers—especially mesothelioma, as well as lung, laryngeal, and ovarian cancers.[56]

LGBTQIA+

LGBTQIA+ people can face special challenges when it comes to cancer. They may have a harder time finding doctors they trust, getting regular checkups, or feeling safe talking about their health. Some may also have a higher risk for certain types of cancer. It's important for LGBTQIA+ individuals to get cancer screenings and care that respects who they are. Health care providers should create a welcoming, inclusive space for everyone. For more information, visit the American Cancer Society or the National LGBT Cancer Network.

Men with Breast Cancer

Breast cancer is most common in women, but men can get it too. Many people don't know this, so men might ignore warning signs like a lump in the chest area, changes in the skin, or nipple discharge. This can lead to a delay in getting diagnosed. It's important for men to know that breast cancer is possible and to talk to a doctor if something doesn't feel right. In Maine, the rate of male breast cancer is just over 1 per 100,000 population or between 8-16 Mainers per year. The rate of

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[52] Li, S., Oliva, P., Zhang, L. *et al.* Associations between per-and polyfluoroalkyl substances (PFAS) and county-level cancer incidence between 2016 and 2021 and incident cancer burden attributable to PFAS in drinking water in the United States. *J Expo Sci Environ Epidemiol* (2025). https://doi.org/10.1038/s41370-024-00742-2

[53] https://www.iarc.who.int/news-events/iarc-monographs-evaluate-the-carcinogenicity-of-perfluorooctanoic-acid-pfoa-and-perfluorooctanesulfonic-acid-pfos/

[54] https://pmc.ncbi.nlm.nih.gov/articles/PMC10698640/?utm_source=chatgpt.com

[55] https://www.iaff.org/cancer/national-firefighter-registry/

[56] https://www.cancer.org/cancer/risk-prevention/chemicals/asbestos.html?utm_source=chatgpt.com

male breast cancer in Maine has not increased over the last twenty years. For more information, visit the American Cancer Society or the National Cancer Institute.

Mental Health

Mental health challenges are prevalent among individuals diagnosed with cancer, significantly impacting their quality of life and treatment outcomes. Studies indicate that up to 27 percent of cancer patients experience depression, and approximately 10 percent suffer from anxiety, no matter the stage of disease or treatment phase.[57] These conditions can slow down treatment and recovery, highlighting the need for integrated mental health care in oncology settings. Implementing routine distress screening and providing psychosocial support services, such as counseling and support groups, are essential strategies to address these issues.[58] In addition, incorporating physical activity has been shown to alleviate depression and improve overall well-being in cancer patients.[59] A comprehensive approach that combines medical treatment with mental health support is crucial for enhancing overall care and outcomes for cancer patients.

Oncology Workforce

The oncology workforce is facing increasing challenges, with staff burnout being a major concern that threatens the quality and continuity of cancer care. Oncologists, nurses, and support staff often deal with high emotional demands, long hours, and increasing administrative burdens, leading to elevated rates of burnout and job dissatisfaction.[60] A 2021 American Society of Clinical Oncology survey found that nearly 45% of oncologists reported symptoms of burnout.[61] This can lead to workforce shortages, reduced patient care quality, and higher turnover rates. These pressures highlight the urgent need for interventions such as mental health support, workload management, and investments in workforce development.

Opioid (Mis)use

Opioid misuse presents a complex issue in the context of cancer prevention and palliative care. While opioids are not directly involved in causing cancer, the broader opioid epidemic has influenced prescribing practices and public health priorities, indirectly affecting cancer care. In palliative care settings, opioids are essential for managing moderate to severe cancer-related pain; however, concerns about misuse, diversion, and addiction have led to increased regulatory scrutiny, sometimes limiting access for patients in need.[62] This tension underscores the importance of balanced pain management strategies that ensure adequate symptom relief while minimizing

[57] https://pmc.ncbi.nlm.nih.gov/articles/PMC10540791/?utm_source=chatgpt.com

[58] https://www.cdc.gov/cancer-survivors/hcp/mental-health-care/index.html

[59] https://www.cancer.org/cancer/latest-news/how-exercise-can-help-manage-depression-during-cancer.html#:~:text=Physical%20activity%20offers%20plenty%20of,mental%20health%20during%20cancer%2C%20too.

[60] https://meetings.asco.org/abstracts-presentations/228098

[61] https://ascopubs.org/doi/10.1200/EDBK_156120

[62] https://www.cancer.gov/news-events/cancer-currents-blog/2023/disparities-opioids-cancer-pain-end-of-life

the risk of misuse. Clinicians are encouraged to use evidence-based guidelines and risk assessment tools to navigate this balance.[63]

System Capacity and Resource Constraints

Currently, there are several proposed federal funding cuts to cancer research at the National Institutes of Health as well as screening, prevention, and surveillance programs at the U.S. CDC. If implemented, these budget cuts will limit work on cancer prevention and treatment and impact the ability to evaluate progress and monitor trends in cancer incidence and mortality. In addition, health systems in Maine are navigating financial hardship due to delayed payments and reductions in reimbursement for services. These will impact their ability to deliver care and may lead to hospital closures and cuts to services.[64]

Veterans

Veterans may have a higher risk of cancer because of things they were exposed to during their service, like chemicals, radiation, or burn pits. Some veterans may also have delays in getting screened or treated for cancer due to PTSD, long wait times at VA (Veterans Affairs) facilities, and they may not know they are at a higher risk for certain cancers due to exposures during their service. It's important for veterans to talk to their doctor about their service history and get regular checkups. In 2024, following federal action, the National Oncology Program at the VA resumed reporting to the Maine Cancer Registry after a nearly 20-year pause.[65] The VA offers cancer care and support for veterans. To learn more, visit the VA's cancer care page or the American Cancer Society.

[63] https://www.cdc.gov/overdose-prevention/hcp/clinical-guidance/index.html

[64] https://www.fightcancer.org/releases/president%E2%80%99s-proposed-262-cut-department-health-and-human-services-budget-devastating-fight

[65] https://docs.house.gov/billsthisweek/20240304/FY24%20MVA%20Conference%20JES%20scan%203.1.24.pdf

Appendix C – Cancer Screening Recommendations

U.S. Preventive Services Task Force Cancer Screening Guidelines				
Cancer Type	**Ages 21-29**	**Ages 30-39**	**Ages 40-49**	**Ages 50+**
Breast	Talk to your health care provider about your risk, including family history and genetics	Talk to your health care provider about your risk, including family history and genetics	Mammogram every 2 years	Mammogram every 2 years until age 74
Cervical	Pap test every 3 years	Pap test every 3 years, **OR** Pap and HPV test every 5 years	Pap test every 3 years, **OR** Pap and HPV test every 5 years	Pap and HPV test every 5 years until age 65
Colorectal	Talk with your health care provider about your risk, including family history and genetics	Talk with your health care provider about your risk, including family history and genetics	Starting at 45, colonoscopy every 10 years **OR** stool test every 1 to 3 years	Colonoscopy every 10 years **OR** stool test every 1 to 3 years
Lung				CT scan for current or past smokers until age 80 – talk with your health care provider bout benefits/risks
Prostate			Talk with your health care provider about benefits and risks of the PSA test	Talk with your health care provider about benefits and risks of the PSA test
Skin	Total body skin exam every year	Total body skin exam every year	Total body skin exam every year	Total body skin exam every year

American Cancer Society
Every cancer. Every life.®

Get your tests!

Recommended cancer testing can help save your life.
Ask your doctor or nurse about these tests.

Recommended Cancer Screening Tests

25 to 39 Years	40 to 49 Years	50+ Years	GLOSSARY
Colorectal Cancer Screening Find out if you are at high risk for colon or rectal cancer. If not, then no screening is needed at this time.	**Colorectal Cancer Screening** Start regular screening at age 45, and continue through age 75. For people ages 76 to 85, the decision to be screened should be based on their preferences, life expectancy, overall health, and prior screening history. Several types of tests can be used. Talk with a health care provider about which tests are best for you. No matter which test you choose, the most important thing is to get screened.		**Colorectal Cancer Screening** These tests can help prevent colorectal cancer or find it early when it may be easier to treat. Colorectal cancer can be prevented by finding and removing a polyp before it becomes cancer.
Prostate Cancer Screening No screening is needed at this time.	**Prostate Cancer Screening** Starting at age 45, men at high risk, all Black men, and men with close family members who had prostate cancer before age 65 should discuss the potential risks and benefits of screening with a health care provider. Men at even higher risk (those with more than one first-degree relative who had prostate cancer before the age of 65) should have that discussion with a health care provider starting at age 40. They should then decide if they want to be screened with a PSA blood test with or without a digital rectal exam.	**Prostate Cancer Screening** At age 50, men who are at average risk of prostate cancer and are expected to live at least 10 more years should talk with a health care provider about the potential risks and benefits of screening to decide if screening is right for them. If they decide to be screened, they should have a PSA blood test with or without a digital rectal exam. They should talk to their doctor about how often they will get screened.	**Prostate Cancer Screening** Levels of prostate-specific antigen (PSA) in the blood may be higher in men with prostate cancer, in addition to other conditions. With a digital rectal exam, a health care provider checks the prostate for lumps or abnormal size.
Breast Cancer Screening Find out if you are at high risk for breast cancer. If not, screening is not needed at this time. Tell your doctor or nurse right away if you notice any changes in the way your breasts look or feel.	**Breast Cancer Screening** Women ages 40 to 44 should have the choice to start breast cancer screening with mammograms every year if they wish to do so. Starting at age 45, they should get a mammogram every year.	**Breast Cancer Screening** Get a mammogram every year between the ages of 45 and 54; then at 55, you can switch to mammograms every 2 years, or continue yearly screening. Screening should continue as long as you are in good health and are expected to live at least 10 more years.	**Mammogram** A screening mammogram is an x-ray of the breast that is used to help look for signs of breast cancer in women who don't have any breast symptoms or problems.
Cervical Cancer Screening People ages 25 to 65 years old who have a cervix should get a primary HPV test every 5 years. If a primary HPV test is not available, get a co-test every 5 years or a Pap test alone every 3 years. People ages 66 and older who have had regular cervical cancer screening in the past 10 years with normal results should not be screened. People who have had serious cervical precancer should be screened for at least 25 years after that diagnosis, even if screening continues past age 65 years. People whose cervix and uterus were removed by surgery should stop screening unless the surgery was done to treat cervical cancer or a serious precancer. People who have been vaccinated against HPV should still follow the screening recommendations for their age groups.			**Pap Test** The Pap test checks for cell changes or abnormal cells in the cervix. **HPV Test** The human papillomavirus (HPV) test checks for the virus and can be done at the same time as the Pap test. **Primary HPV test** An HPV test that is done by itself for screening **Co-testing** Testing with an HPV test and a Pap test
		Lung Cancer Screening If you currently smoke or used to smoke, are ages 50 to 80, and are at high risk for lung cancer because of a 20-pack or more a year history of cigarette smoking, you might benefit from screening for lung cancer with a yearly low-dose CT scan.	**Lung Cancer Testing** People who smoke or used to smoke are at higher risk for lung cancer. Talk to a health care provider about your risk for lung cancer, and the possible benefits, limitations, and harms of getting screened for early lung cancer.

Insurance typically covers prevention and screening services. Please check to confirm your specific health care benefits. If you do not have insurance or cannot afford screening, visit cancer.org/getscreened for more information.

Be sure to tell your doctor or nurse if you have had any type of cancer or if your mother, father, brother, sister, or children have had cancer.

You may need to begin screening for some cancers earlier or be screened more often if you have certain risk factors. Talk to your doctor about this.

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