



Connecticut Cancer Plan 2021-2026



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This publication was supported in part by Cooperative Agreement Number DP17-1701 from the Centers for Disease Control and Prevention. Support was also provided by the Connecticut Department of Public Health. Its contents are solely the responsibility of the Connecticut Cancer Partnership and do not necessarily represent the official view of the Centers for Disease Control and Prevention, Connecticut Department of Public Health, or any other participating entity.

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Letter from the Commissioner of Public Health

STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

Manisha Juthani, MD
Commissioner



Ned Lamont
Governor
Susan Bysiewicz
Lt. Governor

January 2022

Dear Residents of Connecticut:

I am pleased to present the Connecticut Cancer Plan, 2021-2026, a plan that reflects a commitment to moving toward a future marked less by disparity, but rather by more progress toward cancer control equity in Connecticut. Cancer is the second most common cause of death in the U.S. The American Cancer Society estimates that 608,570 Americans (1,667 per day) died of cancer in 2021 and about 1.9 million new cancer cases were diagnosed in the U.S. in 2021. Reports from the organization Health Professionals for Diversity Coalition shows that Black women with breast cancer are 67 percent more likely to die from the disease than are white women. The mortality rate for Black infants is almost 2.5 times greater than it is for Whites.

The Connecticut Tumor Registry indicates that 101,736 new cancers were diagnosed from 2011-2015. The Plan serves as a roadmap for the cancer control community, identifying and prioritizing goals, objectives, and strategies. The implementation of the Plan depends on untold numbers of Connecticut residents working toward the common vision of reducing the burden of cancer.

While Connecticut fares well by comparison to other states' statistics, delving into the data reveals disturbing inequities. Addressing the disparate burden of cancer in our state is the underlying driving concept of this Plan. Progress must be made, through the collaborative efforts of organizations and individuals across the state, to improve the general health and cancer outcomes of Connecticut residents, regardless of their race, ethnicity, socioeconomic status, sexual orientation, or geographic location. This Plan, through its identification of disparities and its focus on strategies geared toward populations of focus in our state, recognizes social determinants of health are critical factors in any one person's cancer journey.

The Connecticut Cancer Partnership, as the state cancer control coalition, works with the Comprehensive Cancer Program at the Connecticut Department of Public Health, aligning closely with guidance from the Centers for Disease Control and Prevention. The Partnership, celebrating its 20th anniversary in 2022, has produced previous multi-year state cancer plans, and continually tracks benchmark data, working with the Connecticut Tumor Registry to identify changing needs and to adjust priority areas over time for ongoing



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Letter from the Commissioner of Public Health

(continued)

STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH



Manisha Juthani, MD
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initiatives. Every person involved with the health of the community, as a patient, a provider, a researcher, a funding organization, or a policy maker at the local or state level can find value in identifying their own role in strategies contained within this plan.

I welcome your involvement and advocacy in improving the health, reducing inequities, and relieving the burden of cancer for all Connecticut residents.

Sincerely,

A handwritten signature in black ink, appearing to read "Manisha Juthani".

Manisha Juthani, MD
Commissioner



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Acronyms

AA	African American	HPV	Human Papillomavirus
ACA	Affordable Care Act	HBV	Hepatitis B virus
ACIP	Advisory Committee on Immunization Practice	HRSA	U.S. Health Resources and Services Administration (a division of HHS)
ACR	American College of Radiology	IARC	International Agency for Research on Cancer
ACoS	American College of Surgeons Commission on Cancer	IOM	Institute of Medicine
ACS	American Cancer Society	IRB	Institutional Review Board
ACSCAN	American Cancer Society Cancer Action Network	JCAHO	Joint Commission on Accreditation of Healthcare Organizations
ADA	American Diabetes Association	LGBTQ	Lesbian, Gay, Bisexual, Transgender, Queer
AAIR	Age-Adjusted Incidence Rate	MACRA	Medicare Access and CHIP Reauthorization Act of 2015
AAMR	Age-Adjusted Mortality Rate	MCO	Managed Care Organization
AHA	American Heart Association	MIPS	Merit-Based Incentive Payment System
ALA	American Lung Association	MMWR	Mortality Morbidity Weekly Review
AMA	American Medical Association	NAACCR	North American Association of Central Cancer Registries
API	Asian Pacific Islanders	NCCCP	National Comprehensive Cancer Control Program
ASCO	American Society of Clinical Oncology	NMQF	National Minority Quality Forum
BPA	Best Practice Advisory	NCCAM	National Center for Complementary and Alternative Medicine
BRFSS	Behavioral Risk Factor Surveillance System	NCCN	National Comprehensive Cancer Network
CCP	Connecticut Cancer Partnership	NCI	National Cancer Institute
CHCACT	Community Health Care Association of Connecticut	NHO	National Hospice Organization
CTBCCEDP	Connecticut Breast and Cervical Cancer Early Detection Program	NIH	National Institutes of Health
CDC	Centers for Disease Control and Prevention	NIS	National Immunization Survey
CHW	Community Health Worker	PSA	Prostate-Specific Antigen
CISNET	Cancer Intervention and Surveillance Modeling Network	PSE	Policy, Systems, and Environment
CoC	American College of Surgeons Commission on Cancer	RAC	Regional Action Council
CMS	Center for Medicare and Medicaid Services	SDE	State Department of Education
CPHA	Connecticut Public Health Association	SDM	Shared Decision Making
DMHAS	Department of Mental Health and Addiction Services	SEER	Surveillance, Epidemiology, and End Results Program
DPH	Department of Public Health	SES	Socioeconomic Status
EBV	Epstein-Barr Virus	SDoH	Social Determinants of Health
EHR	Electronic Health Record	SPF	Sun Protective Factor
EIP	Emerging Infections Program	STD	Sexually Transmitted Disease
EMR	Electronic Medical Record	TBD	To Be Determined
ENDS	Electronic Nicotine Delivery System	USPSTF	United States Preventive Services Task Force
EPA	U.S. Environmental Protection Agency	UV	Ultraviolet Light
ETS	Environmental Tobacco Smoke	VBC	Value-Based Care
FDA	Federal Drug Administration	VOC	Volatile Organic Compounds
FFS	Fee for Service	VFC	Vaccines for Children
FQHC	Federally Qualified Health Center	WHO	World Health Organization
GHS	Global Health and Safety	YBRS	Youth Behavior Risk Survey
HEAL	Healthy Eating and Active Living	YRBSS	Youth Behavior Risk Surveillance System
HHS	U.S. Department of Health and Human Services		

Introduction

The Connecticut Cancer Partnership, a coalition comprising volunteers representing 150 organizations and hundreds of individual members involved in cancer control from around the state, presents the **Connecticut Cancer Plan, 2021-2026**. This Plan, a road map for controlling cancer in our state, addresses prevention, early detection, and treatment, as well as quality of life for patients and survivors and for those facing the end of life. We recognize first and foremost that differences in cancer outcomes based on race, ethnicity, socioeconomic status, social determinants of health (SDoH), and other factors exist in our state. Therefore, a primary goal is to carefully assess the impact of policies and practices that can help improve health equity and eliminate cancer disparities.

Organization of the Plan

The Plan's narrative flows from a general concept goal statement to focused priority areas which then narrow down to measurable objectives needed to achieve the goal. Suggested strategies have been drawn from evidence-based best practices that can make progress toward each measurable objective. This flow enables members of the cancer control community across the state to zero in on a role they can play to reduce the burden of cancer in Connecticut.

- Goal 1 is the inclusive and overarching focus on improving health equity
- Goals 2 - 5 represent elements of the cancer continuum: prevention, early detection, treatment, and quality of life from diagnosis through end of life
- Each goal is broken down into priority areas
- Background about each priority area, including data on disparities, is provided, detailing why that issue is identified as a Connecticut cancer control priority
- Measurable objectives with baselines and targets to be achieved by 2026 are offered, when available
- Action and evidence-based strategies are suggested to make progress toward the goal
- Resource notes follow each strategy section

Many strategies that can reduce the burden of cancer in Connecticut can be implemented across the continuum of cancer control. These cross-cutting approaches fall into three basic categories. Since Connecticut's greatest cancer control challenges lie in reducing disparities, the primary focus of this Plan is 1) to promote health equity. Since social determinants of health (SDoH) cut across all measures of well-being, effective solutions often lie in 2) policy, systems, and environmental (PSE) approaches to change. Finally, measuring progress through 3) evaluation will continue to guide the work of the cancer control community moving through and after the duration of this Plan.

Summary of Goals and Priority Areas

Goal 1: Promote, advance, and improve health equity

Priority Areas:

1. Health care access and quality
2. Community-clinical linkages
3. Workforce and education

Goal 2: Promote healthy living and cancer prevention through risk factor reduction

Priority Areas:

1. Healthy living
 - a. Food and nutrition
 - b. Physical activity and healthy eating
 - c. Tobacco and vaping cessation
 - d. Alcohol consumption
2. Exposure to environmental carcinogens
 - a. Radon
 - b. Ultraviolet light
3. Clinical interventions proven to prevent cancer
 - a. HPV vaccination
 - b. Hepatitis screening and vaccination
 - c. Genetic risk assessment and counseling

Goal 3: Increase screening and early detection of cancer

Priority Areas:

1. Breast cancer screening
2. Colorectal cancer screening
3. Lung cancer screening
4. Cervical cancer screening
5. Prostate screening, based on shared decision-making

Goal 4: High-quality cancer treatment is available and accessible to all

Priority Areas:

1. High-quality, evidence-based diagnostic and treatment services adherent to national standards
2. Supportive services to reduce barriers to optimal care
3. Precision, targeted, or personalized cancer treatment
4. Clinical trials

Goal 5: Optimize quality of life for cancer survivors through treatment, survivorship, and end of life care

Priority Areas:

1. Psychosocial support services
2. Survivorship services
3. Palliative care
4. Serious Illness/end of life/hospice care

What Does the Connecticut Cancer Partnership Do?

The Connecticut Cancer Partnership, through the volunteer efforts of its workgroups and members, the Connecticut Department of Public Health Cancer Control Program, staff, and community partners:

- Convenes cancer community partners
- Educates cancer control partners
- Mobilizes advocates for cancer control, including addressing policy, systems, and environmental changes
- Monitors data trends related to the burden of cancer
- Disseminates best practices to improve care across the continuum of cancer control
- Promotes implementation of evidence-based interventions

It supports the work of its members by providing a statewide context for cancer-related programming through each iteration of the Connecticut Cancer Plan. Members of the Partnership are drawn from the state's diverse cancer community—academic and clinical institutions; survivors and caregivers; state and local government; health care agencies, industry, and insurers; and advocacy and community groups representing populations of focus. Members work individually and in workgroups to support the Partnership's mission of reducing the burden of cancer for Connecticut residents, with a special focus on the elimination of cancer-related disparities.

Mission Statement

Members of the Connecticut Cancer Partnership met over a period of several months in 2019 to develop a mission statement to guide the Partnership and the development of the state cancer plan. This statement reflects the overall goal of the Connecticut Cancer Plan, 2021-2026.

To reduce the cancer burden and disparities across Connecticut by fostering statewide coordination and collaboration and by strategically leveraging information and resources across the cancer control continuum.

Partnership leaders described its vision of the role of the Partnership as:

- Enhancing inclusivity in membership, partners, and those being served;
- Informing cancer control activities and research through timely dissemination of relevant data and resources;
- Fostering networking and collaborations across all sectors; and
- Monitoring and responding to the evolving cancer control landscape.

The Connecticut Cancer Plan, 2021-2026 identifies steps to be taken to reduce the burden of cancer in Connecticut. Implementation of the strategies is undertaken by the organizational members of the Connecticut Cancer Partnership—the hospitals, local health departments, clinics, community health centers, physicians' offices, non-profit organizations, advocacy groups, and educational and academic programs and the people who work or volunteer for them. These are the organizations that know their own communities and clients, can recognize local barriers to access to care, and know what resources may be available to overcome those barriers.

What You and Your Organization Can Do to Fight Cancer in Connecticut

The Connecticut Cancer Plan, 2021-2026 includes specific information for each area of cancer control. To make a difference in the fight against cancer, the continued commitment of organizations and individual members is required. Progress is possible once we harness the dedication of individuals and all types of organizations to implement data-driven strategies as well as policy, systems, and environmental changes.

Here are specific ways you and your organization can contribute to reaching the goals presented in this Plan

Individuals:

You are part of Connecticut's progress in its fight against cancer. You fit into this plan. You can:

- Advocate for policy changes that support equitable provision of services
- Address inequities in your community by speaking up
- Raise awareness about healthy lifestyles and data-driven clinical interventions that can prevent cancer
- Vote and contact your elected officials about cancer issues
- Support funding for programs and policies that reduce exposure to risks
- Educate your employer about how your own policies, systems, and work environment can be improved to reduce the burden of cancer
- Speak out for comprehensive insurance coverage for cancer prevention, detection, treatment, and survivorship services
- Participate or promote participation in clinical trials

Hospitals/Cancer Programs:

- Ensure timely, culturally, and linguistically appropriate services for cancer patients including those who are under- or uninsured
- Support research that addresses population needs across the cancer control continuum with special attention to at-risk populations, cancer disparities, and diversity
- Standardize data collection on race/ethnicity and social determinants of health (SDoH)

- Collaborate to sponsor culturally and linguistically appropriate community screening and education programs for all people, including those who are under- or uninsured
- Support care coordinator, patient navigation, and survivorship programs, addressing obstacles and barriers, including language and cultural barriers
- Leverage technology to support access to telehealth and support for cancer patients, reducing barriers
- Conduct one of the Commission on Cancer (CoC)¹ required annual Quality Improvement Initiatives² on an item within the Plan (see Goal 4, Priority Area 1)
- Ensure that cancer cases are reported in a timely manner
- Seek or maintain accreditation through appropriate national accrediting organizations.
- Enforce tobacco-free policies at your facility and support the cessation efforts of employees and patients
- Provide healthy food and beverage options in vending machines and cafeterias
- Encourage employees to participate in regular physical activity
- Provide meeting space for cancer groups

Primary Care Clinicians:

- Provide culturally appropriate and relevant information, counseling, and referrals for cancer screening tests
- Provide services in a patient's preferred language in a timely fashion and throughout the patient experience

- Adhere to national guidelines such as National Comprehensive Cancer Network (NCCN) and best practices for prevention, treatment, and palliative care³
- Utilize treatment summaries and survivorship care plans, customizing screening recommendations as appropriate
- Address lifestyle and preventive issues such as tobacco use, physical activity, alcohol use, and vaccine use to help reduce cancer incidence

Oncology Clinicians:

- Refer patients to smoking cessation, physical activity, and nutrition programs
- Support and facilitate appropriate clinical trial enrollment or referral
- Adopt regular use of treatment summaries and/or survivorship care plans
- Make timely and appropriate referrals to hospice for end-of-life care
- Refer patients for genetic screening when indicated
- Ensure that all patients, including those who are under- or uninsured, are provided care

Local Health Departments:

- Support culturally and linguistically appropriate policy, systems, and environmental changes for cancer prevention and control
- Provide cancer prevention information and screening programs to citizens
- Collaborate in developing and providing community prevention campaigns
- Work with providers to promote screening programs
- Work with providers to advocate for provision of care to those uninsured
- Provide meeting space for cancer groups

Community or Faith-based Organizations:

- Support culturally and linguistically appropriate policy, systems, and environmental changes for cancer prevention and control
- Provide cancer prevention awareness information and screening programs
- Encourage participation in clinical trials through education and referral as appropriate

- Collaborate to develop and provide community prevention programs
- Advocate for development of the built environment that promotes active living
- Provide space for physical activity programs and nutrition programs
- Provide healthy meals for meetings and events

Employers:

- Support and enforce tobacco-free policies at your facility, offering cessation options to facilitate behavioral change
- Provide healthy food and beverage options in vending machines and cafeterias
- Encourage employees to participate in regular physical activity
- Commit staffing time to assist in implementing one of the Cancer Plan's strategic actions
- Collaborate with hospitals to host screening events
- Use reminders and implement programs to reduce barriers and to encourage employees to have regular cancer screenings (e.g., paid time off for screenings, bringing screenings to the workplace)
- Provide space for community meetings and for physical activity and nutrition programs
- Collaborate with the American Cancer Society and other cancer organizations to promote evidence-based wellness programs for employees

Schools/Universities:

- Support policy, systems, and environmental changes to support healthy lifestyles for cancer prevention
- Work collaboratively to offer programs for professional development and certifications for community health workers and educators
- Include cancer prevention messages in health classes
- Provide healthy food and beverage options in vending machines and cafeterias
- Encourage students and faculty to participate in regular physical activity
- Make your entire campus a tobacco-free environment
- Educate students about risk factors for cancer such as alcohol and vaping
- Host HPV vaccination campaigns

- Support development of the built environment that promotes active living
- Promote volunteer activities for students and staff to help with community educational and screening events for cancer control

Policy Makers:

- Sponsor or support legislation and funding that addresses social determinants of health
- Sponsor or support legislation and funding that promotes cancer research and cancer control throughout the continuum of cancer control from prevention through end of life.
- Raise constituents' awareness about cancer prevention and control programs in your district and help establish new programs where needed
- Commit to ensuring that all Connecticut residents have access to adequate early detection and health care services

- Commit to ensuring that tobacco settlement funds are used for tobacco prevention and cessation and for cancer control
- Advocate and support the development of the built environment that promotes healthy eating and active living
- Prioritize policies that have social equity and/or cancer disparities implications

Funders/Philanthropists and In-Kind Supporters:

- Fund a strategic action from the Connecticut Cancer Plan, 2021-2026
- Commit staffing time to assist in implementation of strategic actions
- Provide meeting space and meeting materials for Partnership activities
- Sponsor conferences, covering costs of speakers and travel, hotel, honorariums, and materials

If you are interested in reducing the cancer burden in Connecticut:

Become a member of the Connecticut Cancer Partnership.

For more information, ideas, or ways to become involved with the Partnership, please go to <http://ctcancerpartnership.org> and click on "Join Us".



Process of Plan Development

The Connecticut Cancer Plan represents the efforts of dedicated Partnership members, subject matter experts, and stakeholders from across the state who worked together through a period of Partnership infrastructure transition to develop a forward-looking cancer control framework to address the needs of the people of Connecticut. Over a period of two years, interrupted by the COVID-19 pandemic, meetings were held to help identify priority needs and strategies. Partnership members were polled for their suggestions and stakeholders were interviewed. Respondents included local public health officials, physicians, nurses, community advocates, patient navigators, social workers, and survivors from all regions of the state, representing small towns as well as our largest cities. The following emerged from the interviews, surveys, and meetings as recommendations for the Partnership moving forward:

- Increase diversity of members and leaders involved in Partnership work
- Communicate with stakeholders, including policy makers, regarding disparities, cancer control strategies, prevalence rates, and advocacy opportunities
- Concentrate efforts to reduce disparities among populations of focus, including racial, ethnic, and rural communities and uninsured, undocumented, and LGBTQ persons
- Address barriers to screening utilizing culturally appropriate strategies
- Support and promote awareness of survivorship programs and easy-to-use care plans
- Support expansion of health navigation and community health worker programs
- Increase education for providers and patients on palliative care and pain management, including non-opioid strategies



Guidance from the Centers for Disease Control and Prevention (CDC)

The Connecticut Cancer Plan, 2021-2026 reflects the guidance of the Centers for Disease Control and Prevention's (CDC) National Comprehensive Cancer Control Program (NCCCP),³ which recommends that state cancer plans focus on using evidence-based interventions across the continuum of cancer control. This Plan echoes those priorities in each chapter by:

Emphasizing Primary Prevention of Cancer

- Increasing vaccination for the Human Papillomavirus (HPV) and the Hepatitis B Virus (HBV)
- Promoting tobacco-free living
- Improving nutrition and physical activity in communities, worksites, and schools
- Promoting sun safety behaviors
- Reducing exposure to radon and ultraviolet (UV) radiation (including artificial UV light sources).

Promoting Early Detection and Treatment of Cancer

- Increasing use of recommended cancer screenings
- Supporting appropriate treatment
- Addressing financial barriers
- Providing emotional support
- Improving access to clinical trials
- Using patient navigators and community health workers

Supporting Cancer Survivors and Caregivers

- Offering survivorship programs
- Promoting survivorship care plans
- Educating and providing relevant, culturally, and linguistically appropriate information to survivors, providers, and caregivers



**Centers for Disease Control
and Prevention – U.S. Cancer
Statistics, Data Visualizations Tool**



Tracking and Implementation of the Cancer Plan

Tracking: Baselines and Targets

Throughout the years covered by this Plan, it will be vital to monitor baseline data and track trends over time to identify priority areas that will inform the work of the Partnership. The Partnership looks to both statewide and nationally set goals as references for baseline and target data, while trying to narrow the focus to areas of the state experiencing disparate rates. Connecticut's [State Health Improvement Plan](#) offers state-specific indicators, baselines, and five-year targets, and Healthy People 2030 Cancer objectives provide nationwide baseline and target data as well as evidence-based practices and other resources.

Implementation

In the implementation of this Cancer Plan, the role of the Partnership is to convene and educate partners, mobilize advocates for cancer control, monitor data trends, and disseminate best practices. This will take place from 2021 - 2026 through an annual action planning process, annual membership meetings and other events, and regular updates through emerging issue communications. It is anticipated that member organizations will work collaboratively to leverage support for this Plan and will be supported by the Partnership and its workgroups.

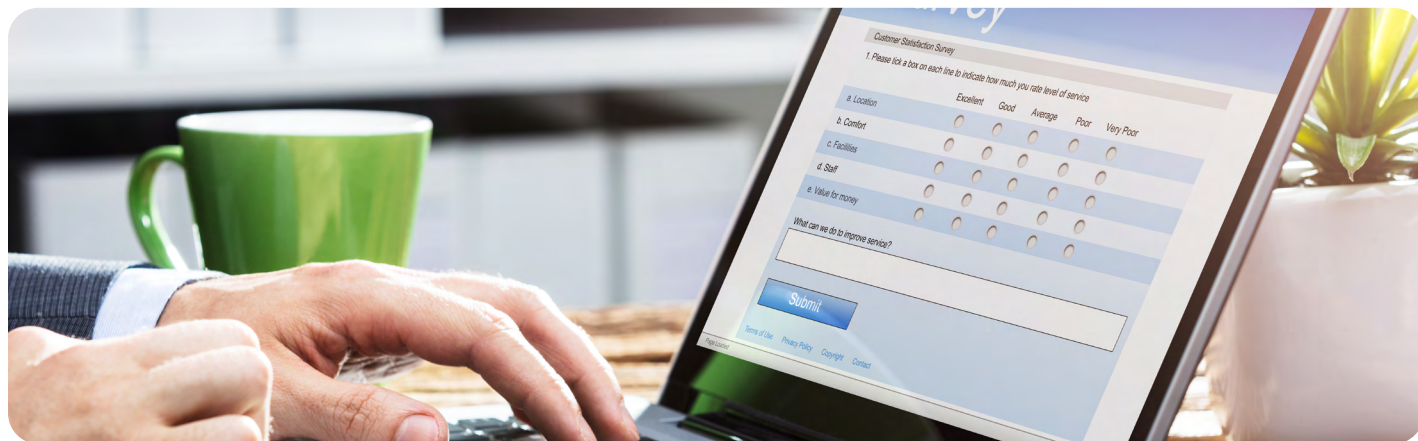
Annual Membership Meetings

The Partnership has the ability and responsibility to convene many diverse organizations and professionals on the far-reaching subjects of comprehensive cancer control. These meetings are evaluated, and participants always rank the opportunity to network and share with colleagues from around Connecticut as the greatest benefit.

Each meeting features educational sessions which often include speakers who are nationally known subject-matter experts, as well as programs that reflect the implementation activities based on priorities laid out in the Cancer Plan. Continuing education and medical credits may be offered in collaboration with member organizations.

In 2019, the Partnership held its sixteenth and most recent annual meeting focusing on the prevention of cancer. Presentations addressed breast cancer risk assessment, characteristics of preventable cancers, colorectal cancer, HPV and oral cancer, tobacco use, and dietary and environmental risk factors for cancer. Recommendations for upcoming annual meetings included covering survivorship, psychosocial, pain management issues, and support services. In-person meetings have not yet been resumed since the COVID-19 pandemic, but plans are being made for upcoming conferences.

Evaluation



The Connecticut Cancer Partnership recognizes that evaluation drives decision-making and resource allocation while identifying changing needs and implementation strategies that are effective. Evaluation improves programs by:

- **Strengthening activities** with participant feedback
- **Preserving resources** through shared evaluation approaches and information sharing
- **Improving outcomes** by monitoring and adjusting program activities during implementation, including monitoring, responding, and adapting to new developments that impact cancer control even if not explicitly outlined in the current plan

The Connecticut Cancer Partnership has committed to implementing evaluation efforts for all supported activities. As part of that commitment, consultants have been engaged to evaluate state Cancer Control funded implementation projects.

STRATEGIES

- Identify staff for program planning, implementation, and evaluation from a variety of backgrounds, perspectives, and cultures
- Engage population of focus in planning, implementation, and evaluation
- Identify and measure outcomes that are important to populations of focus
- Embed measures of health equity and inclusion into all data collection efforts
- Report back findings to populations of focus
- Use lessons learned to continually improve and advance health equity
- Monitor, respond, and adapt to new developments that impact cancer control even if not explicitly outlined in the current plan
- Annually assess and address new or emerging issues through stakeholder discussions to establish annual areas of focus

Resources

- Demonstrating Outcomes Through Evaluation. Cross-Cutting Priorities | CDC

Major and Emerging Issues

Health Equity and Social Determinants of Health

The overarching goal of the Connecticut Cancer Plan, 2021-2026 is to realize improvement in health equity by reducing cancer disparities for Connecticut residents. The highest burdens of cancer fall unevenly on different populations. Health inequity results in different survival rates, incidence of disease, and survivors' quality of life. Race and ethnicity are two of the attributes to be studied to identify differences in the cancer experience which are identified in many of this plan's measurable objectives. However, it is also important to look at geographic area, income, education, gender identity, sexual orientation, and insurance status. The term *social determinants of health* refers to the concept of upstream causes of health disparities that cut across all aspects of life. Access to health care is one of the critical social determinants in cancer outcomes. The five social determinant domains as described in Health People 2030 are shown here.⁴



WHY THIS IS IMPORTANT

Health equity is achieved when **every person** can live their healthiest life, including people in communities with a higher burden of cancer. Progress toward health equity can be made by:

- Training and maintaining a **culturally competent workforce**, including patient navigators, community health workers, and other public health practitioners, to tailor interventions for underrepresented and underserved groups
- Promoting **equitable access to resources** like quality and affordable screening, treatment, and care options
- Improving data measurement in **research and surveillance** and using those data to guide community-driven plans

From the National Comprehensive Cancer Control Program: Cross-Cutting Priorities⁵

In their 2020 report *Making the Case for Health Equity: Cancer Disparity Facts*, the American Cancer Society (ACS) and the American Cancer Society Cancer Action Network (ACSCAN) note that “health equity means everyone has a fair and just opportunity to prevent, find, treat, and survive cancer. Structural and social inequities such as racism, classism, ableism, etc. shape the factors that influence a person’s health, including health-related behaviors and non-medical social and physical environmental factors (e.g., access to healthy and affordable food, transportation, and the financial means to pay for medications, housing, utilities, and other services).”

National data quoted in that report shine a spotlight on specific cancer-related disparities:

- Lower socioeconomic status (SES) persons have higher cancer death rates than higher SES persons. This disparity has worsened over the past 30 years
- African American women are 40% more likely to die of breast cancer than white women
- HPV vaccination coverage rates are 15% lower in rural areas than urban
- Hispanic/Latina women are 35% more likely than non-Hispanic women to have cervical cancer
- The LGBTQ community has a disproportionate burden of cancer, higher prevalence of some risk factors, and more barriers to health care than the general population
- Colon cancer patients without private health insurance and in areas with low oncologist density were less likely to receive adjuvant chemotherapy
- African Americans living in segregated areas had a higher incidence of later stage diagnosis and higher mortality rates from breast and lung cancers^{6 7}

First Person Point of View

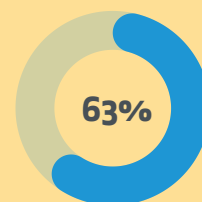
“There need to be more efforts and funds that promote wellness for vulnerable populations in our state including low-income individuals, people living in dense urban areas and food deserts, chronically ill individuals, immigrants, and LGBTQ people (particularly transgender people)”

—Response to June 2020 comprehensive cancer control needs assessment survey

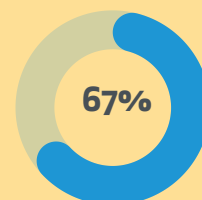
DISPARITIES ALERT

In Feb. 2021, the National Comprehensive Cancer Network (NCCN), ASCAN, and the National Minority Quality Forum (NMQF)⁸ issued a call for urgent action, citing recent polling showing that:

“63% of African American and 67% of Latinx patients, survivors, and caregivers said they had a negative experience with their oncology care team, such as having assumptions made about them or their financial situation or trouble getting questions answered, in contrast to 43% of white respondents who reported such experiences.”



of African American



of Latinx patients, survivors, and caregivers



Policy, systems, and environmental changes (PSE) are self-sustaining interventions that can improve health on a population-wide basis for years, affecting the ways through which health and public health services are delivered. The Connecticut Cancer Plan, 2014-2017 embraced the use of the PSE approach to achieve results, following the recommendations of the National Comprehensive Cancer Control Program (NCCCP) in 2012 requiring that cancer control plans “implement PSE changes to guide sustainable cancer control.”

NCCCP continues to identify the PSE approach to strengthen state cancer control programs. Examples include:

- Policies to protect communities from harmful agents or elements (such as indoor tanning policies to limit exposure to ultraviolet rays or smoke-free policies to limit exposure to secondhand smoke)
- Systems to increase the use of client reminders to get people screened for cancer or to increase access to healthy food choices in schools and workplaces
- Environments to encourage communities to be active (such as pedestrian- and bike-friendly streets)

STRATEGIES

To achieve success in eliminating cancer disparities, it is imperative to address social determinants of health through culturally appropriate approaches, while taking the following steps:

- Identify resources enabling sustainability of new PSE initiatives
- Perform needs assessments to focus on areas of greatest need or inequities
- Collect, analyze, and report on data to track progress over time
- Solicit input and commitment among populations of focus to educate communities and leaders and design and carry out culturally competent interventions
- Promote measures to ensure diversity of workforce
- Establish plans for appropriate evaluation as well mid-term recommendations for redirection

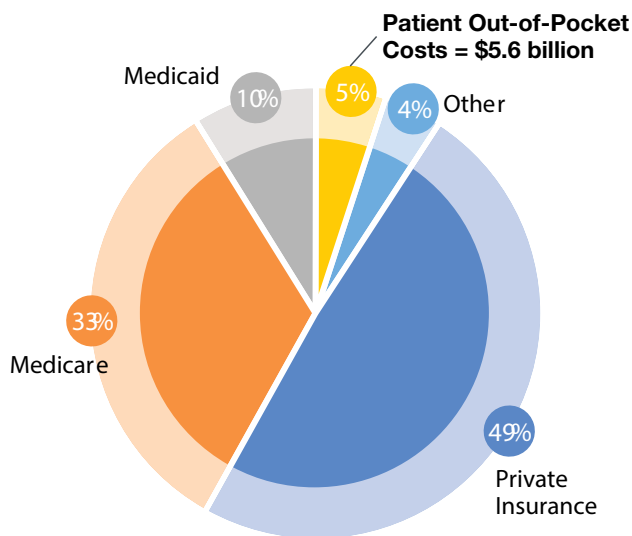
Cost of Cancer

According to the October 2020 report *The Costs of Cancer*, published by the Cancer Action Network and the American Cancer Society, cancer patients in the United State spent \$5.6 billion in out-of-pocket costs for cancer treatment in 2018. Furthermore, cancer cost the country \$183 billion in direct cancer-related health care spending in 2015. This is projected to increase to \$246 billion by 2030. The report also outlines how cancer-caused financial hardship falls hardest on people of color, those who have lower incomes, and/or have lower education levels and younger patients.⁹

The term financial distress or toxicity has been used to convey the ruinous effect of costs associated with cancer screening and treatment. The inability to get paid time off for procedures can be a barrier to screening as well as the cost of the tests themselves for the uninsured, underinsured, or undocumented persons.

These financial burdens fall most heavily on the low-income, historically marginalized, and/or underserved in our communities. Policy, systems, and environmental change approaches hold promise for addressing these barriers through advocacy and education of policy makers.

Everyone Pays the Costs of Cancer Treatment



Source: Data retrieved from the Agency for Healthcare Research and Quality. Medical Expenditure Panel Survey, 2018. <https://meps.ahrq.gov/mepsweb/>

*See reference for category definitions.³ Percentages in chart have been rounded.

First Person Point of View

“For those without insurance and those with poor insurance coverage, [there is a need for] assurance that they can still get good care.”

—Survey response from participant from southwestern Connecticut at Oct. 2019 Pink Tea Cancer Survivor Event

STRATEGIES

The National Cancer Institute (NCI) provides the following suggestions as ways to reduce financial toxicity:

- Patients can meet with a financial navigator for education about health insurance plans and cost-saving methods for treatments
- Hospitals can post their prices so that healthcare professionals and patients know the costs when making decisions about which tests and treatments to use
- Systems can introduce value-based pricing so that patients can choose higher-value treatments with lower out-of-pocket costs
- Organizations and individuals can work to reform health insurance, advocating for policies to improve coverage and reduce gaps¹⁰

First Person Point of View

“LGBTQ+ individuals, and especially transgender individuals, are routinely uninsured and underinsured. They are less likely to be connected to primary care providers who provide competent, respectful, and holistic care. Connecticut should consider giving funds to local health centers that are already focused on LGBTQ+ care, as they are the most likely to be able to engage the LGBTQ+ population in their health efforts. There are several local nonprofit LGBTQ+ health centers that should be considered partners in cancer prevention efforts led by the State.”

—June 2020 needs assessment survey respondent



Emergency Preparedness: Pandemics

The 2020-2021 COVID-19 pandemic revealed challenges to cancer control across the continuum. Policies designed to protect the public at large from infection proved especially difficult for those with underlying conditions such as cancer. Disruptions of the health care system; fear of contagion; employment, food, and housing insecurity; and decreases in employment, insurance coverage, and income have been among the factors leading to cancellations, delays, or avoidance of cancer control interventions. Cancer patients, often among the older population, as well as those at higher risk of cancer, were also among the most vulnerable for poor outcomes from COVID-19. Caregivers were frequently barred from oncology consultations and from hospital visits to ensure a safe environment for patients. Some creative solutions to the problem such as telemedicine by computer or telephone are not available to those lacking resources to utilize this technology.

Access to COVID-19 vaccinations, even in Connecticut, which was relatively successful in the rollout of vaccines, revealed disturbing disparities among Connecticut residents in different geographic locations and in different racial, ethnic, and socioeconomic status demographics. Cancer patients were not initially granted early access to vaccination, often increasing their isolation and distress. Difficulties in making online vaccination appointments highlighted how unanticipated types of barriers can disproportionately affect certain populations.^{11 12}



Effects of COVID-19 on Screening

Screening and treatment rates fell¹³ during the COVID-19 pandemic according to the lead author of a study of 2020 SEER data in two states. Robin Yobuff said, “The findings suggest substantial delays in diagnosis and treatment services for cancers during the pandemic and that ongoing evaluation can inform public health efforts to minimize any lasting adverse effects of the pandemic on cancer diagnosis, stage, treatment, and survival. As data become available, evaluation of the effects of the pandemic on cancer stage at diagnosis and survival will be important, as will evaluation of racial/ethnic, socioeconomic, and geographic disparities in access to care and outcomes.”

According to another study, published in *Frontiers in Oncology*, “Cancer screening programs have been clearly interrupted since the onset of the COVID-19 disease. The anticipated outcomes include delayed diagnosis and marked increases in the numbers of avoidable cancer deaths. Urgent policy interventions are needed to handle the backlog of routine diagnostic services and minimize the harmful effects of the COVID-19 pandemic on cancer patients.”¹⁴

Studies using sophisticated modeling techniques (Cancer Intervention and Surveillance Modeling Network CISNET) are ongoing to evaluate the efficacy of policy interventions that can address the backlog of delayed screening services to minimize the increase in avoidable deaths over the next decades.^{15 16}

STRATEGIES

The American Cancer Society recommends that cancer control communities implement the following strategies to resume cancer screenings.¹⁷

1. Implement focused efforts to screen people who historically have had low screening prevalence and are most affected by COVID-19
2. Include in decision-making people who historically have had low screening prevalence and are most affected by COVID-19
3. Make investments to address the underlying causes of low screening prevalence in communities and foster resilience
4. Identify existing policy gaps contributing to screening disparities and advocate for high-impact policy changes

Childhood Cancer and Survivorship

Childhood cancer is relatively rare, accounting for less than 3% of cancers diagnosed each year in the United States.¹⁸ However, cancer is the second leading cause of death (following accidents) in children ages 1 - 14. Improved treatments have led to better childhood cancer survival rates over the past few decades.

However, survivors of childhood cancers may face challenges throughout life due to late effects of treatment, which may include secondary cancers as well as disturbances in every organ system, including cardiovascular, endocrine, reproductive, respiratory, musculoskeletal, nervous, digestive, renal, urinary, visual, and auditory systems. It is also well documented that children previously treated for cancer often suffer from mental health and psychosocial issues.

Some cancer centers caring for adult survivors of childhood cancers offer specialized survivorship care. Long-term follow-up guidelines were developed by the Children's Oncology Group for use by clinicians whose patients are childhood cancer survivors.¹⁹ Special needs of the caregivers of pediatric patients are also complex, since parents may need to spend long periods of time away from the siblings of the patient and may face significant emotional, logistical, and financial stresses.

A recent commitment of \$50 million annually for ten years starting in 2020 was made by the federal government to fund research at the National Cancer Institute through the Childhood Cancer Data Initiative (CCDI). The CCDI is designed to bring childhood research, advocacy, and clinical communities together to use data to meet the following goals:

- Gather data from every child, adolescent, and young adult diagnosed with a pediatric cancer
- Create a national strategy of appropriate clinical and molecular characterization to speed diagnosis and inform treatment for all types of pediatric cancers
- Develop a platform and tools to bring together clinical care and research data that will improve preventive measures, treatment, quality of life, and survivorship for pediatric cancers^{20 21 22 23 24}



Care Models: Value-Based Care in Oncology

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) went into effect in 2019. According to the Center for Medicare and Medicaid Services (CMS), the goal of this legislation is to “reward better care, not just more care.” Intended to move the healthcare system to move from fee-for-service (FFS) care and toward value-based care (VBC), MACRA is designed to play a major role in the process. There are at least 14 quality measures within MACRA directed to oncology practices. Measures include advance care plans and quality of life indicators such as quantification of pain intensity, plan of care for relief of pain, proportion of patients receiving chemotherapy in the last 14 days of life, proportion of patients admitted to intensive care in the last 30 days of life, and proportion of patients admitted to hospice for less than 3 days.

Oncology practices may participate in the Merit-Based Incentive Payment System (MIPS). MIPS payment adjustments in 2022 will be based on submitting data and performance for MIPS categories in 2020.²⁵

Resources

- Leading Health and Cancer Advocacy Groups Unite to Reduce Racial Disparities in Cancer Care. NCCN. <https://static1.squarespace.com/static/5be307ae5b409bfaa68b1724/t/60352adc96d42552aea5da69/1614097117225/NCCN%2C+ACS+CAN%2C+and+NMQF.pdf> and Microsoft PowerPoint - FINAL ECE Webinar Slide Deck_Handout.pptx (nccn.org)
- Understanding and addressing social determinants to advance cancer health equity in the United States: A blueprint for practice, research, and policy. CA: A Cancer Journal for Clinicians, by Alcaraz et al. Oct. 2019. <https://doi.org/10.3322/caac.21586>
- What is MIPS? Health Insight. MIPS Measures for Oncologists (healthinsight.org)
- Quality Payment Program. CMS 2020. <https://qpp.cms.gov/about/qpp-overview>
- Building Healthy Communities through Policy, Systems, and Environmental (PSE) Approaches. CDC. <https://www.cdc.gov/cancer/ncccp/priorities/cross-cutting-priorities.htm>
- A Practitioner’s Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease. <https://www.cdc.gov/nccdphp/dch/pdf/healthequityguide.pdf>
- Costs of Cancer. October 2020 edition. ACS and CAN. <https://www.fightcancer.org/sites/default/files/National%20Documents/Costs-of-Cancer-2020-10222020.pdf>

Burden of Cancer in Connecticut

This section of the Plan describes the impact of cancer on the people of Connecticut. Cancer incidence and mortality rates and trends are presented. Cancer-related risk behaviors in Connecticut residents are also summarized.

It is estimated that there will be 22,910 new cancer cases and 6,400 cancer deaths in 2021ⁱ. There were 20,734 new cancer cases and 6,472 cancer deaths in 2018.ⁱⁱ

Connecticut's overall cancer mortality rate is 134 per 100,000 persons, favorably comparing to that of the United States at 149 per 100,000.ⁱⁱⁱ However, Connecticut experiences concerning disparities when data are broken down by race and ethnicity, as well as by income and geography.

Most Commonly Diagnosed Cancers by Site in Connecticut (both sexes)

	Incidence (New Cases, 2018)	Estimated New Cases, 2021	Deaths (2019)	Estimated Deaths, 2021
All Sites	20,734	22,910	6,496	6,400
Female Breast	3245	3,500	440	420
Lung and Bronchus	2560	2750	1401	1,350
Prostate	2784	3,160	385	390
Colon and Rectum	1586	1,560	505	440
Urinary Bladder	1066	1,180	219	
Non-Hodgkin Lymphoma	869	1,010	221	230
Melanoma of the Skin	838	1,300	89	80
Pancreas	669	730	513	550
Liver		480		320
Brain and Other Nervous System		290		210

2018 and 2019 data from Connecticut Tumor Registry

DISPARITIES ALERT (2009–2018 data)

Incidence and Mortality Disparities

- Among women in Connecticut, the incidence rate for all cancers combined was highest in non-Hispanic white women (453 per 100,000 women) and lowest in non-Hispanic Asian-Pacific Islander and non-Hispanic American Indian/Alaska Native women (248 and 262 per 100,000 women, respectively)
- Among men in Connecticut, the incidence rate for all cancers combined was highest among non-Hispanic Black men and non-Hispanic white men (517 and 504 per 100,000 men, respectively) and lowest in non-Hispanic American Indian/Alaska Native and non-Hispanic Asian-Pacific Islander men (195 and 226 per 100,000 men, respectively)
- The most commonly diagnosed cancer in Connecticut women was breast cancer, accounting for approximately three out of every ten cancers diagnosed. The incidence rate of breast cancer was highest in non-Hispanic white women (145 per 100,000 women), compared to 121 per 100,000 in Hispanic women and 129 per 100,000 in non-Hispanic Black women. However, despite the lower incidence rate in non-Hispanic Black women, the mortality rate was highest in this group (23 per 100,000 in non-Hispanic Black women, compared to 18 per 100,000 in non-Hispanic white women, 13 per 100,000 in Hispanic women, and 8 per 100,000 in non-Hispanic Asian-Pacific Islander women)
- The most commonly diagnosed cancer in Connecticut women was breast cancer, accounting for approximately three out of every ten cancers diagnosed. The incidence rate of breast cancer was highest in non-Hispanic white women (145 per 100,000 women), compared to 121 per 100,000 in Hispanic women and 129 per 100,000 in non-Hispanic Black women. However, despite the lower incidence rate in non-Hispanic Black women, the mortality rate was highest in this group (23 per 100,000 in non-Hispanic Black women, compared to 18 per 100,000 in non-Hispanic white women, 13 per 100,000 in Hispanic women, and 8 per 100,000 in non-Hispanic Asian-Pacific Islander women)
- The mortality rate for all cancers combined was significantly higher in non-Hispanic Black men (196 per 100,000) than in any other racial/ethnic group
- There is a notable geographical disparity in cancer mortality rates across Connecticut's 8 counties. The rate in Windham County (168 deaths per 100,000 persons) is significantly higher than the other counties and is not experiencing the decreasing trend seen elsewhere



Incidence and Mortality Rates

Incidence Rates

Tracking rates over time allows us to monitor where progress has been made and highlight areas for future efforts. For all cancers combined, the incidence rate decreased by 1.8% per year in men and 0.8% per year in women over the period 2009 – 2018. Significant declines in the incidence of new cancers were observed in colorectal cancer, lung cancer, prostate cancer, bladder cancer, leukemia, and melanoma in men; and in colorectal cancer, liver cancer, lung cancer, melanoma, bladder cancer, and thyroid cancer in women. In contrast, the incidence rates of cancer of the oral cavity and pharynx increased significantly in both men and women over the same period (by 1.8% and 1.6% per year, respectively).

Mortality Rates

The Connecticut mortality rate for all cancers combined was:

- 159 per 100,000 in men, down from 173 per 100,000
- 117 per 100,000 in women, down from 126 per 100,000
(2018 data compared to 2014 data)

Mortality rates continue to fall in both men and women in Connecticut. Over the period 2009 – 2018, the mortality rate for all cancers fell by 2% in both men and women. Significant reductions in mortality from stomach cancer, colorectal cancer, lung cancer, prostate cancer, bladder cancer, and leukemia have been observed in men. In women, mortality has fallen for colorectal cancer, lung cancer, melanoma, breast cancer, and non-Hodgkin lymphoma. These reductions are due in part to early detection of cancers as well as advances in treatment.

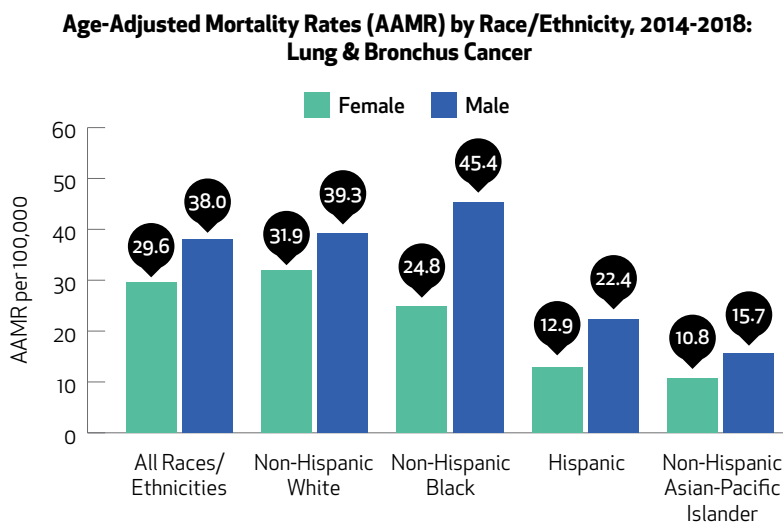
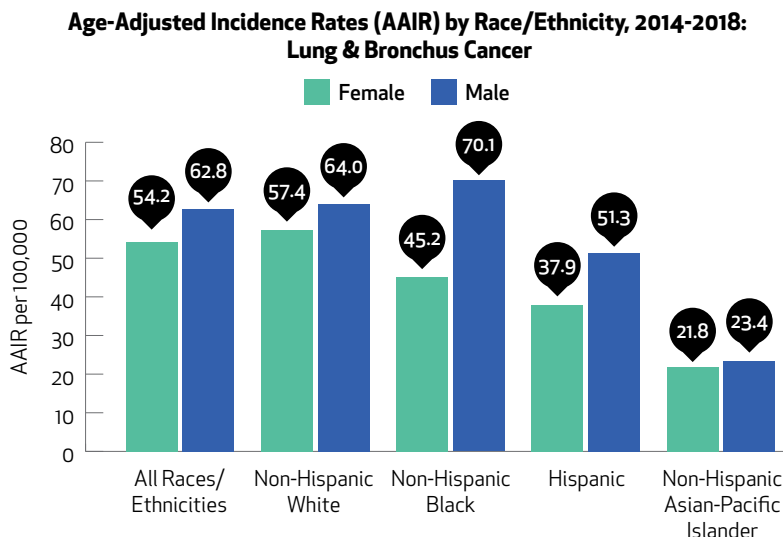
Stage of Cancer at Diagnosis

The stage of a cancer at diagnosis describes how far the cancer has spread at the time it was diagnosed and is an important prognostic indicator. Cancers usually respond better to treatment and have better outcomes when they are diagnosed at an early stage, whereas distant- or late-stage cancers, where the cancer has spread from the primary site to distant organs or lymph nodes, generally show poorer outcomes. About 1 in 20 breast cancers diagnosed in Connecticut women were late-stage cancers, while almost half of all lung cancers and around 1 in 5 colorectal cancers in Connecticut residents were diagnosed at a late stage. Since there are approved screening tests for these types of cancers, increased utilization of these tests can reduce mortality rates by finding the cancers at an earlier stage, when treatment is more successful.

Tables by Cancer Type

The following tables show the incidence and mortality rates of the most commonly diagnosed cancers by sex and race over the period from 2014 to 2018 in Connecticut.

Lung Cancer

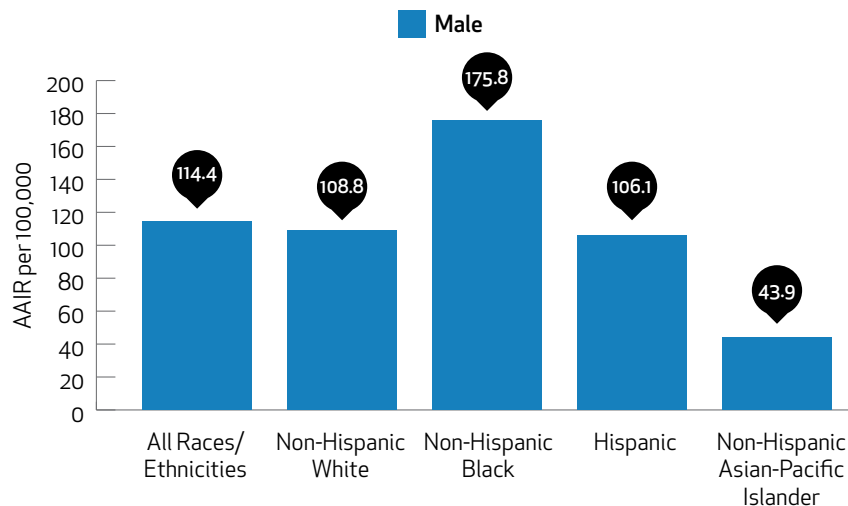


The leading cause of cancer death in Connecticut was lung cancer, accounting for nearly one in every four cancer deaths in both men and women in 2018.^{iv}

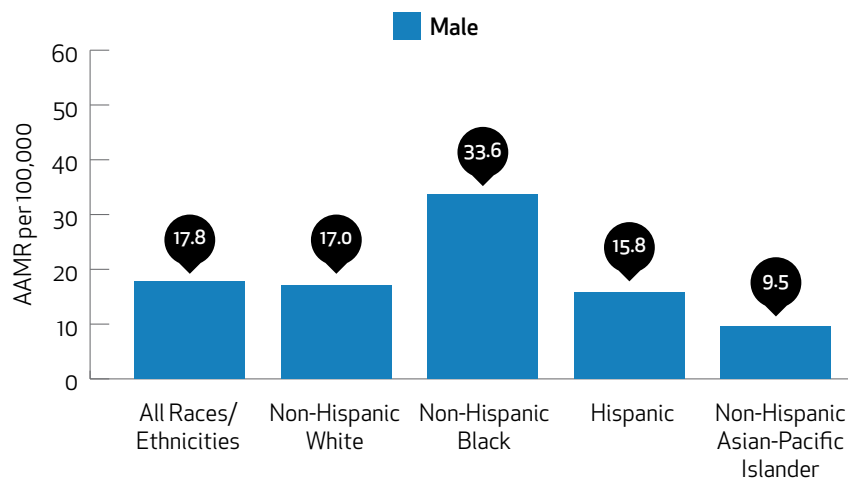
- In men, lung cancer mortality rates were highest in non-Hispanic Black men (45 per 100,000) and lowest in non-Hispanic Asian-Pacific Islander men (16 per 100,000), although the rate was not significantly lower than all racial/ethnic groups
- In women, lung cancer mortality rates were highest in non-Hispanic white women (32 per 100,000) and lowest in non-Hispanic Asian-Pacific Islander women (11 per 100,000), although the rate was not significantly lower than all racial/ethnic groups
- Over the 10-year period 2009 – 2018, there was an annual decline in lung cancer mortality rates of 4.5% in men and 3.7% in women

Prostate Cancer

**Age-Adjusted Incidence Rates (AAIR) by Race/Ethnicity, 2014-2018:
Prostate Cancer**



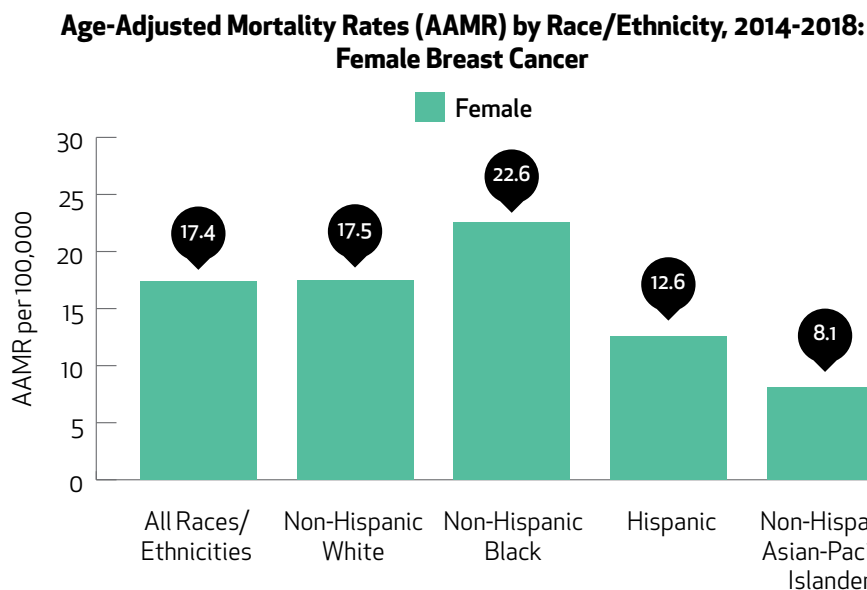
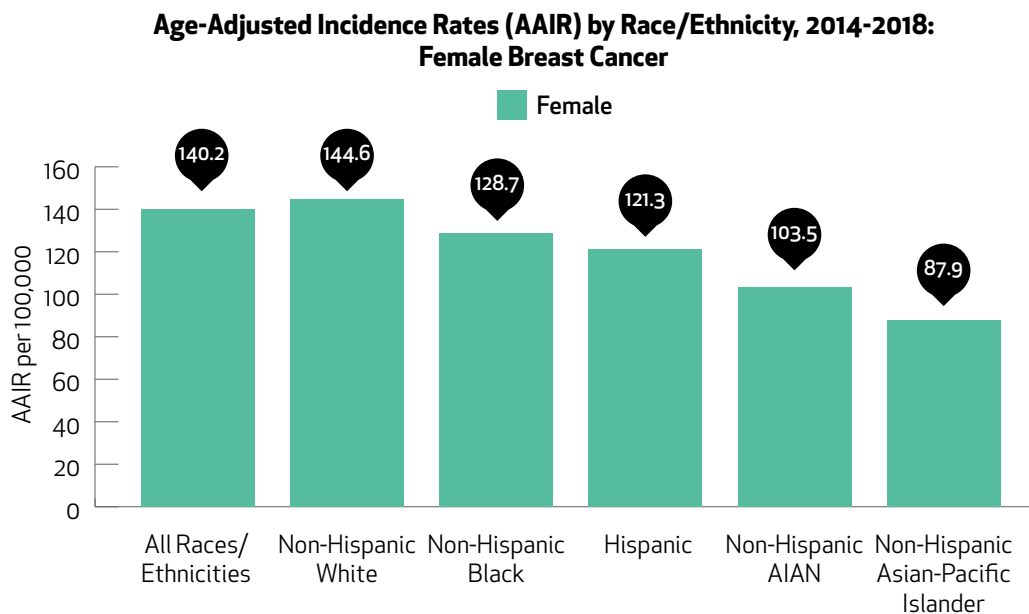
**Age-Adjusted Mortality Rates (AAMR) by Race/Ethnicity, 2014-2018:
Prostate Cancer**



The second leading cause of cancer death in Connecticut in men was prostate cancer, accounting for one in every ten cancer deaths in men in 2018.^v

- The prostate cancer mortality rate was highest in non-Hispanic Black men (34 per 100,000) and lowest in non-Hispanic Asian-Pacific Islander men (10 per 100,000), although the rate was not significantly lower than all racial/ethnic groups
- Over the 10-year period 2009 – 2018, the prostate cancer mortality rate fell by an average of 1.7% per year

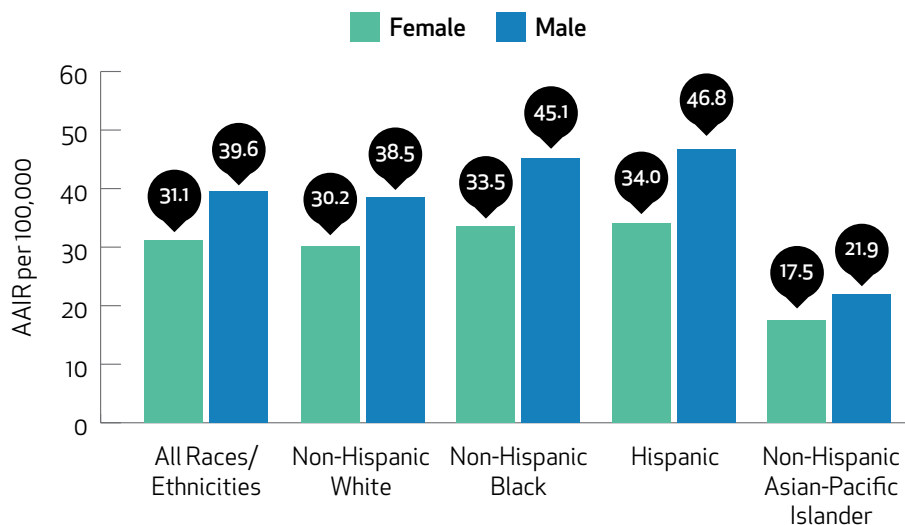
Breast Cancer



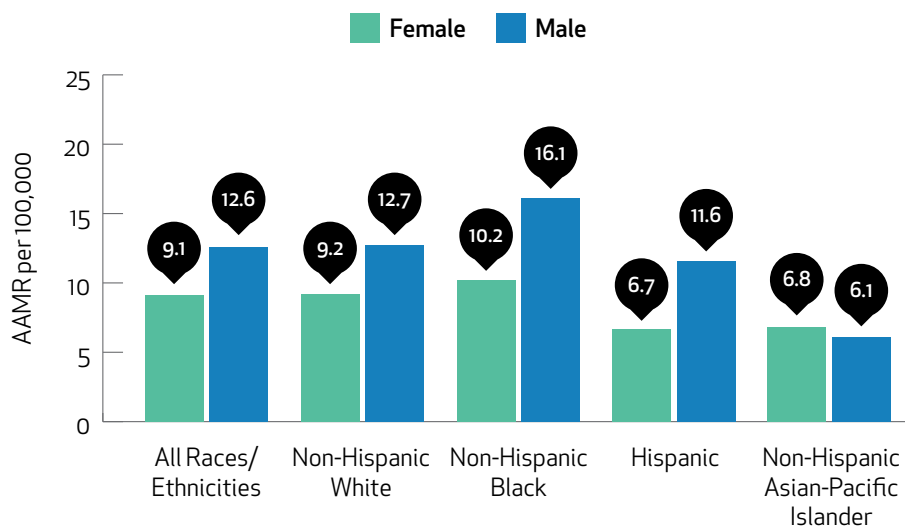
- The second leading cause of cancer death in Connecticut in women was breast cancer, accounting for more than one in every eight cancer deaths in women in 2018^{vi}
- The breast cancer mortality rate was highest in non-Hispanic Black women (23 per 100,000), despite having a lower incidence rate compared with non-Hispanic white women, and lowest in non-Hispanic Asian-Pacific Islander women (8 per 100,000), although the rate was not significantly lower than all racial/ethnic groups
- Over the 10-year period 2009 – 2018, the breast cancer mortality rate in women fell by an average of 2.4% per year

Colorectal Cancer

**Age-Adjusted Incidence Rates (AAIR) by Race/Ethnicity, 2014-2018:
Colon & Rectum Cancer**



**Age-Adjusted Mortality Rates (AAMR) by Race/Ethnicity, 2014-2018:
Colon & Rectum Cancer**

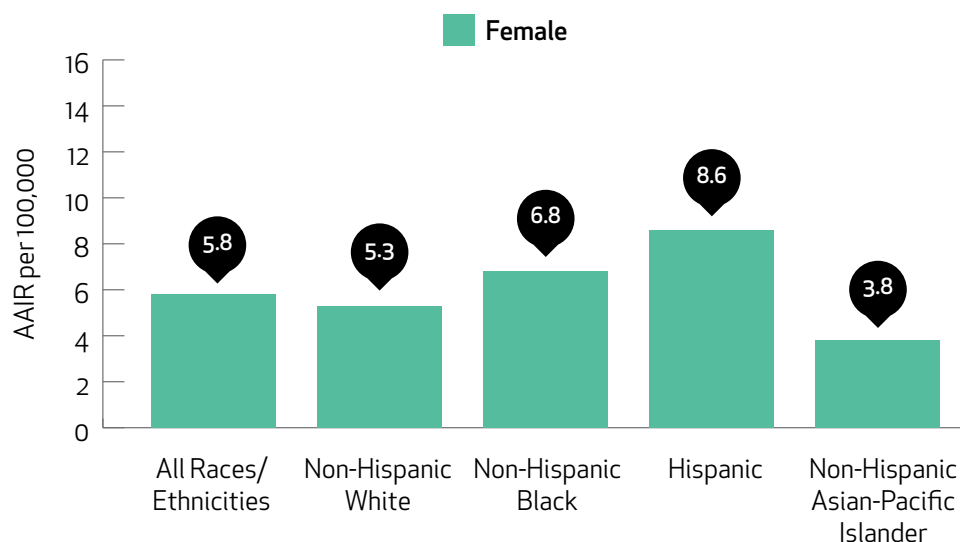


The fourth leading cause of cancer death in Connecticut was colorectal cancer, accounting for almost one in every thirteen cancer deaths in both men and women in 2018.

- Colorectal cancer mortality rates were highest in non-Hispanic black men (16 per 100,000) and women (10 per 100,000) and lowest in non-Hispanic Asian-Pacific Islander men (6 per 100,000) and Hispanic women (7 per 100,000), although the rates were not significantly different from the other racial/ethnic groups
- Over the 10-year period 2009 – 2018, there was an annual decline in colorectal cancer mortality rates of 2.6% in men and 2.7% in women

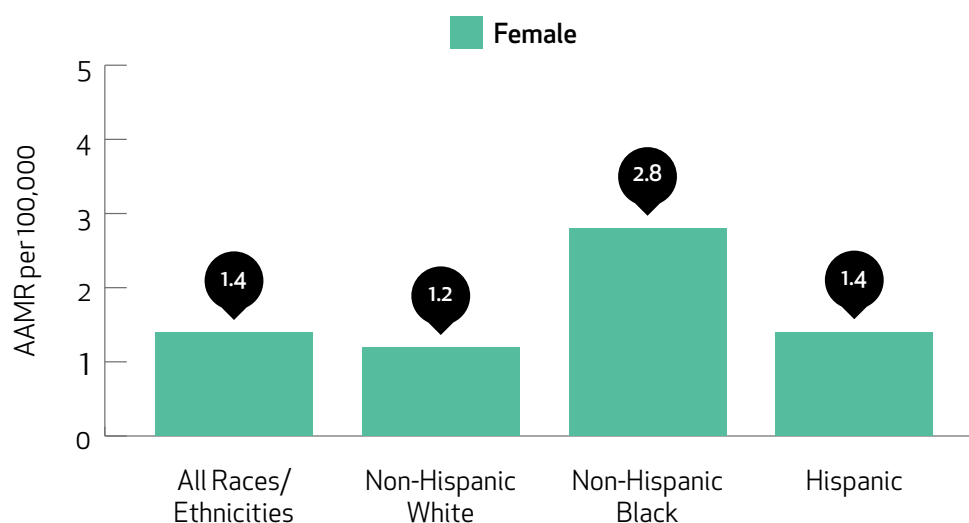
Cervical Cancer

**Age-Adjusted Incidence Rates (AAIR) by Race/Ethnicity, 2014-2018:
Cervix Cancer**



Hispanic women had the highest incidence of cervical cancer, with 9 cases per 100,000 women between 2014 – 2018. The lowest rate for cervical cancer was seen among Non-Hispanic Asian-Pacific Islanders (4 per 100,000). However, these rates were not significantly different from all other racial/ethnic groups.

**Age-Adjusted Mortality Rates (AAMR) by Race/Ethnicity, 2014-2018:
Cervix Cancer**



Non-Hispanic Black women had the highest mortality rates of cervical cancer, with 2.8 per 100,000 women. This is double the rate for non-Hispanic white and Hispanic women, despite Hispanic women having the highest incidence rate. The difference between the rates of non-Hispanic Black vs. non-Hispanic white women was statistically different.

Cancer-Related Risk Behaviors in Connecticut Residents

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual health survey that allows us to monitor health risk behaviors in the population. Several cancer risk factors may be examined through the BRFSS, including tobacco use, excessive alcohol consumption, diet, physical activity, and obesity. In addition, use of preventive services such as cancer screening can be explored. BRFSS data from 2018 reveal the following trends.^{vii}

- Smoking prevalence in Connecticut adults is in decline. In 2018, 12.2% of adults in the state were current smokers, compared with 17.1% in 2011. However, rates among Blacks (18.2%) and Hispanics (16.5%) and the uninsured (19.7%) were significantly higher than the state average
- The 2018 CT BRFSS results showed that 19.6% of adults in Connecticut reported having tried e-cigarettes in their lifetime, and according to the 2019 Connecticut School Health Survey (CT YRBSS), current use of electronic vapor products rose to 27.0% among high school students^{viii}
- In 2018, 22.8% of adults reported no leisure time physical activities or exercises, including running, calisthenics, golf, gardening, or walking within the last 30 days. This was a slight increase from the 2016 rate of 21%. A higher percentage (30.4 %) of Black and Hispanic adults reported no leisure time physical activities
- In 2018, 28.4% (up from 27% in 2016) of men and 26.4% (up from 25%) of women in Connecticut were obese (body mass index (BMI) of 30 or higher). While the obesity rate for non-Hispanic whites was 26.1%, for Blacks the rate was 36.5% and for Hispanics the rate was 31.1%
- In 2018, 18.8% of Connecticut adults reported binge drinking within the past 30 days, an increase from the 2016 rate of 17%
- In 2018, about 16% of Connecticut women ages 18 or older reported not having a pap test in the past 3 years
- In 2018, about 78.1% of Connecticut adults ages 50 – 75 had ever had a sigmoidoscopy or colonoscopy, and 14.8% had had a fecal occult blood test in the past year
- In 2018, 33.8% of Connecticut men aged 40 or older reported having a PSA test within the past 2 years. Rates were highest in men aged 55 and over (46.3%), non-Hispanic white men (37.1%), and men with a household income of \$75,000 or more (37.0%)

Resources

- Connecticut 2019 State Health Assessment, Chapter 6: Chronic Disease. https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/state_health_planning/SHA-SHIP/HCT2025/SHA-Chapters/6_Chronic-Diseases-chapter_CT_SHA_Report_Final060520-6.pdf.
- Swett, K., Gonsalves, L., and Mueller, L.M. 2019. Cancer in Connecticut. Hartford, CT: Connecticut Department of Public Health. Health and Surveillance Section, Connecticut Tumor Registry. Cancer in Connecticut. A Report on the Burden of Cancer in the State. March 2019. [CancerInConnecticut2019.pdf](#). Updated with 2014-2018 data.
- U.S. Cancer Statistics: The Official Federal Cancer Statistics. Data Visualizations. Connecticut. Centers for Disease Control and Prevention and National Cancer Institute. www.cdc.gov/cancer/dataviz,
- The National Cancer Database (NCDB). NCDB Public Benchmark Reports
- Access Public NCDB Benchmark Reports
- Cancer Cases Reported to the NCDB by Tumor Type and AJCC Stage
- Navigation Guide for Public NCDB Benchmark Reports
- Access Public NCDB Benchmark Reports
- Cancer Cases Reported to the NCDB by Tumor Type and AJCC Stage
- Navigation Guide for Public NCDB Benchmark Reports
- AccessHealthCT. Disparities and Social Determinants of Health in Connecticut. February 2021. https://agency.accesshealthct.com/wp-content/uploads/2021/02/10811_01_AHCT_Disparities_Report_V4.pdf

i Cancer Statistics Center By State. American Cancer Society. <https://cancerstatisticscenter.cancer.org/#/state/Connecticut>

ii U.S. Cancer Statistics. CDC. <https://gis.cdc.gov/Cancer/USCS/#/AtAGlance/>

iii State Cancer Profiles. NIH. NCI. <https://www.statecancerprofiles.cancer.gov/deathrates/index>.

iv Cancer Facts and Figures 2021. ACS. file:///C:/Users/lhhog/Downloads/cancer-facts-and-figures-2021.pdf

v United States Cancer Statistics: Data Visualizations. CDC. <https://gis.cdc.gov/Cancer/USCS/>

vi United States Cancer Statistics: Data Visualizations. CDC. <https://gis.cdc.gov/Cancer/USCS/>

vii Zheng X., Jorge C. (2021) Health Indicators and Risk Behaviors in Connecticut: 2018. Results of Connecticut Behavioral Risk Factor Surveillance Survey (BRFSS), Connecticut Department of Public Health, Hartford, Connecticut (www.ct.gov/dph/BRFSS). Zheng X., Jorge C. (2021) Health Indicators and Risk Behaviors in Connecticut: 2018. Results of Connecticut Behavioral Risk Factor Surveillance Survey (BRFSS), Connecticut Department of Public Health, Hartford, Connecticut (www.ct.gov/dph/BRFSS).

Goal 1: Promote, Advance, and Improve Health Equity

Priority Areas:

1. Health care access and quality
2. Community-clinical linkages
3. Workforce and education

G-1, Priority Area 1: Health Care Access and Quality

WHY THIS IS IMPORTANT

“Reducing the uninsured population is not possible without targeting the subpopulations with the largest groups of uninsured. Only 5.9% of Connecticut’s population is uninsured, but this relatively small number hides significant disparities...”

“Hispanics in Connecticut are almost 4 times more likely to be uninsured than Non-Hispanic Whites; Blacks are 3 times more likely than Whites. Blacks and Hispanics have also lost health insurance coverage at a greater rate during the pandemic.

“While most Connecticut neighborhoods cluster in a range with 2% to 6% uninsured residents, many neighborhoods across the state have 20% or more uninsured residents, several exceed 30%.

“Invariably, the latter neighborhoods are disproportionately composed of Hispanics or Blacks, as are the cities and towns where the neighborhoods are located.” Health Disparities and Social Determinants of Health in Connecticut February 2021. AccessHealth CT.³⁴



DISPARITIES ALERT

- According to the CDC, gay men are at the highest risk of and have increased incidences of gonorrhea, chlamydia, herpes, human papilloma virus (HPV), and HIV. Lesbians and bisexual women are less likely to get preventive cancer screenings such as pap smears and mammograms; have higher incidences of HIV, hepatitis C, and self-reported gonorrhea; and are more likely to be overweight or obese. In addition, LGBT populations have high rates of use of tobacco, alcohol, and other drugs
- The National Transgender Discrimination Survey of 6,450 transgender and nonconforming participants also provides extensive data on the challenges faced by transgender individuals. Discrimination was frequently experienced in accessing health care. Due to their transgender status, 19% were denied care and 28% postponed care due to perceived harassment and violence within a health care setting³⁵



Health Care Access and Quality Objectives

- Decrease the percentage of Connecticut residents under the age of 65 without health insurance from 5.9% (2019) to 4.7% (U.S. Census Small Area Health Insurance Estimates and KFF)³⁶
- Increase number of health systems employing community health workers and/or lay navigators (data source-developmental)³⁷



STRATEGIES

- Analyze results of 2020 BRFSS optional Health Care Access module to identify needs³⁸
- Advocate for continued inclusion of optional Health Care Access module in state BRFSS
- Advocate for full affordable health care insurance coverage
- Ensure health outcomes are measured and tracked by race and ethnicity to inform interventions
- Work with state partners and business and industry organizations to build support for paid leave policies for cancer screenings
- Simplify patient access by offering “one stop shopping,” such as “FLU-FIT” clinics that offer colorectal screening tests at the same time as the flu vaccine, ensuring that recipients of FIT kits are linked with providers for follow-up
- Support training of community health workers or lay patient navigators within populations of focus
- Reduce barriers to accessing screening by offering non-clinical settings for screening (i.e., community locations, worksites) and modifying clinic hours to offer evening screening options
- Systematize client reminders for cancer screenings, ensuring that information provided to the patients is culturally and linguistically appropriate



Connecticut Spotlight

YALE'S CANCER DISPARITIES FIREWALL

The Yale Cancer Center's Cancer Disparities Firewall pilot project is a community-facing program that brings together the resources and expertise of local communities with those of an NCI-funded Cancer Center to address cancer prevention and cancer screening in the community. Using a health equity lens, a team of health navigators screen for Social Determinants of Health (SDoH) barriers, identify health goals, and navigate community residents towards cancer risk reduction services such as cancer screening and tobacco treatment, while also connecting them to local resources to address SDoH and related barriers such as food insecurity and transportation to medical appointments. Focusing on high burden cancers, the program has partnered with a local community college to incorporate a cancer curriculum into Navigation and Community Health Worker (CHW) training programs as well as a large Federally Qualified Health Center (FQHC) to develop a multipronged approach to addressing cancer needs in the community. While this pilot has focused on cancer prevention and screening, the larger vision is to include SDoH screenings into expanded health navigation that supports patients throughout the continuum of care. New clinical partnerships between Yale Cancer Center oncologists and community clinicians have been developed to strengthen care collaboration and culturally competent shared decision-making and reduce patient loss to follow-up. The ultimate goal is to improve cancer outcomes, eliminating disparities.^{39,40,41}

Resources

- Cancer Disparities Firewall. <https://www.bms.com/about-us/responsibility/bristol-myers-squibb-foundation/our-focus-areas/specialty-care/yale-cancer-center.html#:~:text=Yale%20Cancer%20Center's%20%E2%80%9CCancer%20Disparities,Cancer%20Center's%20neighborhood%20catchment%20area>.
- Elevating Cancer Equity: Recommendations to Reduce Racial Disparities in Access to Guideline Adherent Cancer Care. https://www.nccn.org/docs/default-source/oncology-policy-program/2021_recommendations_for_elevating_cancer_equity.pdf?sfvrsn=5d2c0d84_2
- Health Disparities and Social Determinants of Health in Connecticut. February 2021. https://agency.accesshealthct.com/wp-content/uploads/2021/02/10811_01_AHCT_Disparities_Report_V4.pdf
- Health Disparities in Connecticut: Causes, Effects, and What We Can Do by Arielle Levin Becker. January 2020. <https://www.cthealth.org/publication/health-disparities-in-connecticut-causes-effects-and-what-we-can-do/>
- Health Equity Toolkit for Local Health Departments and Other Partners. Health Equity Toolkit LHD - CT.gov
- Health Insurance Coverage of the Total Population. <https://www.kff.org/other/state-indicator/total-population/?currentTimeframe=0&selectedRows=%7B%22states%22:%7B%22connecticut%22:%7B%7D%7D%7D&sortModel=%7B%22colId%22:%7D%7D%7D>
- Understanding and addressing social determinants to advance cancer health equity in the United States: A blueprint for practice, research, and policy. Alcaraz et al. 2020. CA A Cancer J Clin, 70: 31-46. Understanding and addressing social determinants to ...

G-1, Priority Area 2: Community-Clinical Linkages



Community-clinical linkages are connections made among health care systems and services, public health agencies, and community-based organizations to improve population health.

Community-clinical linkages objectives⁴²

- Establish, maintain, and document at least 5 strategic partnerships within community, research, and clinical sectors
 - Disseminate the results of the connection between community, research, and clinical sectors with sharing of best practices and lessons learned from successful strategic partnerships
- Develop and share best practice guidelines for contributions of capacity support (e.g., content area expertise, evaluation, funding, and staff)
- Inform practitioners and community representatives about the latest evidence-based approaches through annual publications or meetings

First Person Point of View

“Our providers and support staff should be more involved in the community to do outreach and help answer concerns.”

–Clinical participant in CCP 2019 annual meeting

STRATEGIES⁴³

- Advocate for funding for linkages with community organizations for cancer screening, diagnosis, and treatment for low-income and uninsured people
- Plan and develop standard operating procedures to maintain cancer prevention and control activities during a state of emergency to ensure timely cancer screenings, diagnosis, and treatment
- Reduce structural barriers to cancer screening and diagnostic work-up, such as modifying hours of service and offering services in alternative settings to better meet patient needs
- Encourage employers to provide employees with paid time off at work for cancer screening appointments or to provide subsidized screenings on-site
- Utilize targeted client reminders to encourage evidence-based screening
- Adopt culturally sensitive patient navigation and/or community health worker programs
- Encourage payers to reimburse for patient navigation, including navigation conducted by community health workers
- Implement innovative methods to identify hard-to-reach, underserved populations
- Increase community engagement in targeted outreach and education about cancer to populations of focus, using champions and leaders from the community to sustain the linkage
- Ensure that healthy information provided is age, literacy, and culturally appropriate
- Collaborate with representatives of populations of focus to help design, implement, and evaluate outreach programs
- Advocate for uniform reporting of race/ethnicity and SDoH data to improve targeted outreach



Resources

- Community-Clinical Linkages for the Prevention and Control of Chronic Diseases: A Practitioner's Guide. 2016. <https://www.cdc.gov/dhds/pubs/docs/ccl-practitioners-guide.pdf>
- United State Census. Selected Characteristics of Health Insurance Coverage in the U.S. <https://data.census.gov/cedsci/table?t=Health%20Insurance&g=0400000US09&y=2018&tid=ACSST1Y2018.S2701&hidePreview=true>
- Community-Clinical Linkages in the Maryland Comprehensive Cancer Control Plan. https://phpa.health.maryland.gov/cancer/cancerplan/SiteAssets/SitePages/publications/MCCCPCCompanion_CCL_Final.pdf
- Financial Impact of Racial and Ethnic Health Disparities in Connecticut. https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/hems/chronic_dis/DisparityAnalysis/Disparity_Summary_DEC_2018-final.pdf
- Clinical-Community Linkages. <https://www.ahrq.gov/ncepcr/tools/community/index.html>
- What is MIPS? MIPS Measures for Oncologists (healthinsight.org)
- Connecticut Department of Public Health Strategic Plan 2019-2023. <https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/State-Health-Planning/Strategic-Planning/CTDPH2019Strategic-Plan-final.pdf?la=en>

G-1, Priority Area 3: Workforce and Education



Workforce objective

- Support development of programs to advocate for racial, ethnic, gender identity, and sexual orientation diversity in the cancer workforce

First Person Point of View

“Southwestern AHEC (Area Health Education Center) began building the foundation for introducing Community Health Workers (CHWs) into Connecticut’s delivery of health care. This was done by playing a lead role in making a case for the critical role of CHWs in providing quality, culturally appropriate, cost-effective health care, especially for vulnerable and medically underserved communities.”

–Program Manager, Southwestern AHEC, Inc.

STRATEGIES

- Disseminate examples of successful approaches to enhance diversity in recruitment and retention practices
- Share best practices of partnerships with minority-serving institutions to provide a pipeline for career development
- Publish examples of loan repayment programs at graduate levels
- Showcase models of success and employer mentorship programs through meeting presentations and/or publications

A lack of racial and ethnic diversity among researchers and in the health care workforce can contribute to cancer health disparities. Diversity-focused training and career development programs have begun to enhance racial and ethnic diversity in cancer training, although gaps remain. Minorities continue to be underrepresented in the cancer research and cancer care workforce.⁴⁴

The National Cancer Institute has created a program to improve diversity in the cancer workforce. The Center for Cancer Training (CCT) Intramural Diversity Workforce Branch (IDWB) has goals of recruiting and supporting scientists from diverse backgrounds through mentoring in a culture of inclusion to develop research leaders. Programs address K-12 students through STEM programs and recruit graduate students for post-doctoral positions at NCI.⁴⁵



Connecticut Spotlight

ADDRESSING DIVERSITY IN THE CANCER WORKFORCE

Engaging Youth in Cancer Research

A program at the Yale Cancer Center called Cancer Research Opportunities for Youth (CROY) introduces promising underserved New Haven high school students to cancer research while providing peer and faculty mentoring. According to Program Director Beth Jones, PhD, “Intervening early in the educational experience with programs such as CROY has enormous potential to diversify the cancer care and research community. Successful implementation requires flexibility and creativity in organizational structure.” She points out that it is important to set realistic expectations, since the students often face challenges in their lives, such as the death of parents, dealing with foster care, having to leave the program to help a family business, and financial issues that limit college choice.⁴⁶



Resources

- AACR Cancer Disparities Progress Report. 2020. <https://cancerprogressreport.aacr.org/disparities/>
- Connecticut State Office of Health Strategy. Community Health Worker Advisory Body (ct.gov)
- NCI. Building a Diverse Workforce. <https://www.cancer.gov/grants-training/training/idwb>

Recommendations to Enhance Racial and Ethnic Diversity in the Cancer Workforce

ENHANCE DIVERSITY IN RECRUITMENT AND RETENTION PRACTICES.



To increase diversity in academia and industry, it will be important to develop environments where diverse candidates are hired and can advance at the same speed as nondiverse candidates. In academia, the opportunities for promotion must be equal across races and ethnicities; unconscious biases must be addressed systematically across an organization; and hiring committees should be of a diverse makeup, be able to develop a diverse pool of applicants, and utilize objective inputs for candidate selection. Industry should focus on diversity at the board of directors' level, build partnerships with academic institutions, and create or augment hiring policies/practices that are responsive to and accountable for diversity, including encouraging diversity in job candidates and deidentifying resumes in the review process.

INTERINSTITUTIONAL PARTNERSHIPS WITH MINORITY-SERVING INSTITUTIONS TO ENHANCE PIPELINE AND CAREER OPPORTUNITIES.



Many institutions, especially minority-serving institutions (MSIs), lack access to the expertise and facilities necessary to provide training in industry-relevant biotechnology skills. This limits underrepresented minority researchers' participation in the pharmaceutical/biotechnology workforce, hinders minority-led translational research, and reduces opportunities for MSIs to monetize technologies and generate minority-led start-up companies. Facilities are also needed that provide opportunities to learn and implement industry-related skills, understand drug discovery and its role in benefiting society, obtain data for and mentor the writing of Small Business Innovation Research/Small Business Technology Transfer grants, and potentially develop spin-off companies. Additionally, there is a need for more inter-institution level partnership programs, such as the NCI CRCHD Partnerships to Advance Cancer Health Equity (PACHE) program. PACHE promotes the development of partnerships between institutions serving underserved health disparity populations and underrepresented students (ISUPS) and NCI-designated Cancer Centers (CCs). Such partnerships build and strengthen the research infrastructure at ISUPS while expanding cancer health disparities research capacity at CCs, and in the process train diverse students and scientists at both institutions.

PROMOTE CONTINUAL PROFESSIONAL AND LEADERSHIP DEVELOPMENT WITH ACCESS TO MENTORS AND CAREER GROWTH OPPORTUNITIES.



Academic institutions can offer more mentoring and leadership training and/or professional development to prepare students, faculty, and employers for a broad array of careers, including in industry, as some graduates have difficulty identifying opportunities, many are not pursuing tenure-track positions, and others seek a private sector position after an initial foray into academia. It will also be important to support more interprofessional centers of excellence, with shared responsibilities for minority leadership and involvement.

PROVIDE OPPORTUNITY, MENTORSHIP, AND PROTECTED TIME FOR ALL RESEARCHERS.



There is a critical need to attract, train, and retain scientists in the biomedical enterprise. Key training components include exposure to solving a scientific problem, mentorship, and role models. This can be achieved initially at the graduate training level through funding opportunities. Protected time after required postdoctoral training for all researchers, and for physicians after clinical training, is also important, as is continued mentorship on initial publications and how to apply for grants. Additionally, loan repayment programs remain a big need due to the cost of graduate and medical school and the high debt burden. To further support the development of underrepresented minority researchers and leaders, it is necessary to create programs aimed at minorities toward the end of their training that can provide support in terms of research funding and guidance.

SHOWCASE ROLE MODELS AND THE SUCCESS OF CURRENT RESEARCH.



Diverse members of the biomedical workforce need to be visible as potential role models for students and trainees. Additionally, cancer health disparities research can showcase how it positively changes the approach to health care and the success of interventions for individuals and groups.

Goal 2: Promote Healthy Living and Cancer Prevention through Risk Factor Reduction

The goal of decreasing exposure to risk factors for preventable cancers is addressed through three **priority** areas, each further subdivided into focus areas.*

Priority Areas:

- | | | |
|---|--|--|
| 1. Healthy living | 2. Exposure to environmental carcinogens | 3. Clinical interventions proven to prevent cancer |
| a. Food and nutrition | a. Radon | a. HPV vaccination |
| b. Physical activity and healthy eating | b. Ultraviolet light | b. Hepatitis screening and vaccination |
| c. Tobacco and vaping cessation | | c. Genetic risk assessment and counseling |
| d. Alcohol consumption | | |

G-2, Priority Area 1: Healthy Living

WHY THIS IS IMPORTANT

Nutrition and Physical Activity

- Overweight and obesity are clearly associated with an increased risk for developing many types of cancer. About one-quarter to one-third of new cancer cases in the U.S. are estimated to be related to overweight or obesity, physical inactivity, and poor nutrition
- Among students in grades 9 - 12 in the 2019 Connecticut Youth Risk Behavior Survey, 14.4% were obese and 14.3% were overweight. Obesity and overweight rates were significantly higher among Black and Hispanic students, compared to white students
- Persons with low socioeconomic status are more likely to have limited opportunities for physical activity and less access to fresh fruits and vegetables. Policy, systems, and environmental changes can help to alleviate these health inequities

Access to Healthy Food

- In Connecticut, 39% of Blacks and 37% of Hispanics report either poor or fair availability of affordable, high-quality fruits and vegetables, compared to 21% of whites

Alcohol

- Alcohol use is one of the most important preventable risk factors for cancer, along with tobacco use and excess body weight. Alcohol use accounts for about 6% of all cancers and 4% of all cancer deaths in the United States. Alcohol use has been linked with cancers of the mouth, throat, pharynx, larynx, esophagus, liver, colon, rectum, and breast

***Note that the target date for all objectives in the Connecticut Cancer Plan, 2021-2026 is 2026.**

WHY THIS IS IMPORTANT (continued)

Tobacco

- Tobacco product use is the leading cause of preventable disease, disability, and death in the U.S.
- Cigarette smoking can cause cancer almost anywhere in the body, including the mouth and throat, esophagus, stomach, colon, rectum, liver, pancreas, voice box (larynx), trachea, bronchus, kidney and renal pelvis, urinary bladder, and cervix, and it can cause acute myeloid leukemia
- In the U.S., smoking is linked to nearly 9 out of 10 lung cancers
- Cigarette smoking disproportionately affects the health of people with low socioeconomic status
- Cigarette smokers with lower income suffer more from diseases caused by smoking than do smokers with higher incomes
- A higher percentage of Black, non-Hispanic adults, and youth report current use of cigars than persons of other racial/ethnic groups
- The use of e-cigarettes is unsafe for kids, teens, young adults, and pregnant women as well as adults who do not currently use tobacco products. E-cigarettes are the most commonly used tobacco product among youth
- Most e-cigarettes contain nicotine. Nicotine can harm adolescent brain development—development that continues into the early to mid-20s. Nicotine also is highly addictive
- E-cigarette aerosol that users inhale and exhale from e-cigarettes can expose both themselves and bystanders to harmful substances
- Use of smokeless tobacco can cause cancer of the mouth, esophagus, and pancreas and can cause white or grey patches inside the mouth (leukoplakia) that can lead to cancer
- Young people who use smokeless tobacco and e-cigarettes can become addicted to nicotine and may be more likely to also become cigarette smokers
- Adults from rural counties have a higher prevalence of smokeless tobacco use than adults in urban, large metro, or small metro counties^{47, 48, 49, 50}



Food and nutrition objectives

- Decrease the percentage of Black residents reporting poor or fair availability of affordable, high-quality fruits and vegetables from 39% to 35% (Access Health CT data)
- Decrease the percentage of Hispanic residents reporting poor or fair availability of affordable, high-quality fruits and vegetables from 37% to 33% (Access Health CT data)

Physical activity and healthy weight objectives

- Reduce the proportion of Connecticut adults who are overweight/obese from 65.7% (2019) to 59.13% (CT BRFSS 2019 Summary Tables)
- Reduce the proportion of adults who engage in no leisure time physical activity in the last 30 days from 22.8% to 21.8% (CT BRFSS 2019 Summary Tables)

Tobacco objectives

- Reduce the prevalence of current tobacco use among high school students from 17.9% to 16.11% (2017 CT Youth Tobacco Survey)
- Reduce the prevalence of current tobacco use among adults from 12.2% to 11% (2018 CT Behavioral Risk Factor Surveillance System)
- Reduce the prevalence of use by high school students of electronic nicotine delivery systems from 27% to 24% (2019 Connecticut School Health Survey. CT YRBSS)

Alcohol objective

- Reduce binge alcohol drinking in the last 30 days among Connecticut adults by from 18.8% to 15.8% (CT BRFSS 2018)

First Person Point of View

“ We need to do a focused LGBTQ+ education program around preventing cancer, selecting a cancer doctor, and surviving cancer.”

—Stage 4 Cancer survivor’s response
from June 2020 needs assessment



STRATEGIES

- Promote and support policies, systems, and environmental changes that optimize healthy living through good nutrition, increased physical activity, and tobacco and alcohol avoidance
- Collaborate with stakeholders to promote healthy eating and physical activity and advance awareness of the types of policy and environments that support cancer preventive nutritional choices, such as daily access to a variety of fruits and vegetables and avoidance of heavily processed foods
- Increase awareness of alcohol use as a cancer risk factor among Connecticut residents through educational outreach campaigns
- Support policy, systems, and environmental changes to create opportunities for physical activity where Connecticut residents live, work, play, and learn
- Support initiatives that target populations of focus and communities with high prevalence of cancer risk factors, including alcohol and tobacco use
- Collaborate with mental health providers, recognizing that persons with mental health needs may be at higher risk for late-stage diagnosis of cancer, may engage at higher rates of cancer risk factor behaviors, may have less access to regular screening, and may suffer higher rates of adverse cancer outcomes⁵¹
- Monitor trends in data related to cancer risk, including trends in relative cancer risk among populations of focus
- Collaborate with state and local agencies to implement policy for tobacco-free living and the support of cessation efforts⁵²

Resources

- Alcohol Use and Cancer. American Cancer Society. Alcohol Use and Cancer
- DataHaven Community Wellbeing Survey. <https://www.ctdatahaven.org/reports/datahaven-community-wellbeing-survey>
- Select Tobacco Use Data Graphs from the 2019 Connecticut School Health Survey Summary Graphs. <https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/hems/tobacco/PDF/Tobacco-Use-Data-Select-Slides-2019-Youth-Risk-Behavior-Survey.pdf>
- The Toll of Tobacco in Connecticut. Tobacco Free Kids. Connecticut - Campaign for Tobacco-Free Kids (tobaccofreekids.org)
- Tobacco-Related Mortality. CDC. Tobacco-Related Mortality | CDC
- Increasing Healthy Nutrition and Physical Activity Across the Cancer Continuum through Policy, Systems, and Environment Change: A Resource for Comprehensive Cancer Coalitions. American Cancer Society Comprehensive Cancer Control. 2021. https://www.acs4ccc.org/wp-content/uploads/2021/04/NUPA-PSE-in-CCC-Guide_FINAL.pdf
- American Cancer Society. Cancer Prevention & Early Detection Facts & Figures, 2021-2022

G -2, Priority Area 2: Exposures to Environmental Carcinogens

WHY THIS IS IMPORTANT

Radon

Radon is a radioactive gas that forms naturally when uranium, thorium, or radium (radioactive metals) breaks down in rocks, soil, and groundwater. People can be exposed to radon primarily from breathing radon in air that comes through cracks and gaps in buildings and homes.

Health officials estimate that radon is responsible for more than 21,000 lung cancer deaths each year, making it one of the top ten causes of cancer mortality in the United States.

Radon is the second leading cause of lung cancer after cigarette smoking. The combined health effects of radon and tobacco exposure are synergistic, so reducing either of the exposures substantially reduces lung cancer risk.

Ultraviolet Light (UV)

Most skin cancers are a result of exposure to the UV rays in sunlight. Both basal cell and squamous cell cancers (the most common types of skin cancer) tend to be found on sun-exposed parts of the body, and their occurrence is typically related to lifetime sun exposure. The risk of melanoma, a more serious but less common type of skin cancer, is also somewhat related to sun exposure.

There is evidence that people who use tanning beds or booths have a higher risk of skin cancer. The risk of melanoma is higher if indoor tanning starts before age 35, and the risk of basal and squamous cell skin cancer is higher if indoor tanning started before age 25.⁵³

Radon objective

- Increase the percentage of households that test air for the presence of radon gas from 48.2% to 53% (CT BRFSS 2019 Summary Tables)

Ultraviolet light objective

- Increase the proportion of adults ages 18 years and older who always or almost always use at least one sun protective measure (Data: TBD)





STRATEGIES

- Promote and support policies, systems, and environmental changes to reduce exposure to environmental carcinogens
- Promote public awareness regarding radon exposure and encourage radon testing and reduction in homes, schools, and workplaces
- Promote the use of environmental changes, such as shade structures, to reduce the risks of harmful UV exposure and advocate for policies that reduce the risks of harmful UV exposure through artificial sources
- Advocate for inclusion of optional modules on indoor tanning and excess sun exposure modules in state BRFSS
- Support/promote sunscreen education in medical provider settings
- Advocate for the inclusion of sunscreen use on medical intake forms

Resources

- Connecticut Department of Public Health Radon Program. <https://portal.ct.gov/dph/Environmental-Health/Radon/Radon-Program>
- Protect Yourself and Your Family from Radon. CDC. National Center for Environmental Health. Protect Yourself and Your Family from Radon ([cdc.gov](https://www.cdc.gov))
- Reducing the Risk from Radon: Information and Interventions. A Guide for Health Care Providers. HP_Radon_Guide_2018_FINAL.pdf ([ct.gov](https://portal.ct.gov))

G -2, Priority Area 3: Clinical Interventions to Prevent Cancer

WHY THIS IS IMPORTANT

- HPV can cause cancer of the cervix, oropharynx (back of the throat, including the base of the tongue and tonsils), vulva, vagina, penis, and anus. Each year, more than 35,000 men and women are diagnosed with a cancer caused by HPV in the U.S.
- Vaccines protect against the types of HPV that cause most of these cancers. The vaccine used in the United States also protects against the HPV types that cause most genital warts. It is estimated that HPV vaccination can prevent more than 90% of cancers caused by HPV, or about 33,000 cases annually, in the U.S.⁵⁴
- Populations that include large numbers of recent immigrants, such as Hispanics and Asians, have higher rates of cancer related to infectious agents such as HPV. Hispanic women have the highest incidence rate for cervical cancer
- The COVID-19 pandemic resulted in a decline in vaccination rates. The CDC estimates that HPV vaccinations are down by more than 20%, compared to 2019⁵⁵

HPV vaccination objectives

- Increase HPV vaccination rates for males and females ages 13 – 17 from 41.3% to 45.43%⁵⁶ (NIS-TEEN dataset)
- Increase HPV vaccination rates for males and females ages 13 – 17 from 41.3% to 45.43%
- Increase HPV vaccination rates for Black students ages 13 – 17 from 29.2% to 32% (NIS-TEEN dataset)
- Establish commitments from three organizations to offer HPV vaccination in a trusted setting identified by the population of focus
- Establish commitments from 10 primary care clinics and/or Federally Qualified Health Centers in Connecticut to modify clinic hours to offer evening vaccination options
- Increase the proportion of oral and pharyngeal cancers detected at the earliest stage—from 29.5% to 34.2%⁵⁷ (2016 SEER)



STRATEGIES

- In concert with the Connecticut HPV Vaccination Coalition, develop a program that utilizes immunization registry data to provide reporting to providers or health systems, including their HPV vaccination initiation and completion rates compared to that of their peers and to this Plan's goal
- Support the training of healthcare providers on the evidence-based “announcement approach,” meaning clinicians first talk about adolescent vaccines by announcing the child is due for meningitis, HPV, and Tdap vaccines, and then saying, ‘We’ll give those at the end of the visit’⁵⁸
- Support the use of reminder systems in provider offices to increase HPV vaccination completion rates
- Promote professional education for healthcare providers, including guidance on the importance of HPV vaccination, best practices for communicating with parents, and tips for boosting vaccination rates⁵⁹
- Increase public awareness and education for parents, focusing on the message “HPV Vaccine is Cancer Prevention”⁶⁰
- Collaborate with schools and universities on opportunities for HPV education and vaccination.
- Advocate for continued inclusion of optional HPV vaccination module in state BRFSS
- Educate clinicians on financial resources available for uninsured and underinsured populations for the HPV vaccine, including the VFC program

WHY THIS IS IMPORTANT

Hepatitis B Virus and Hepatitis C Virus can cause chronic viral hepatitis, a liver infection that increases a person's risk of liver cancer. Liver cancer is the fastest growing cause of cancer death in the United States. The increase is mainly among adults who have less education, especially men, according to a 2019 study by the American Cancer Society (ACS). Inequities in liver cancer and death rates have persisted in populations with fewer resources due to infection and behavioral risk factors. In the United States, the Hepatitis B Virus (HBV) vaccine is recommended for all children.⁶¹

The Advisory Committee on Immunization Practices (ACIP) also recommends vaccination of adults at risk for Hepatitis B Virus (HBV) infection, including universal vaccination of adults in settings in which a high proportion have risk factors for HBV infection and vaccination of adults requesting protection from HBV without acknowledgment of a specific risk factor.

The CDC recommends Hepatitis C screening at least once in a lifetime for all adults ages 18 years and older and for all pregnant women during each pregnancy.

Hepatitis screening and vaccination objectives

- Disseminate clinical education to practitioners to raise awareness of the importance of appropriate hepatitis screening

STRATEGIES

- Advocate for evidence-based interventions to reduce exposure to and infection with Hepatitis B and C



WHY THIS IS IMPORTANT

Genomics

Part of the trend toward personalized cancer care is based on the use of the genetic profile of a tumor to improve diagnosis and allow for targeted therapies. Increasingly, cancers are being classified and sub-classified by their molecular characteristics, as opposed to just tissue of origin. For example, registration of breast cancers now includes their estrogen and progesterone receptor status and HER2/neu status.

Genetic Risk Assessment and Genetic Counseling

Genetic risk assessment is becoming a routine part of cancer control. The NCI has developed information for hereditary cancer syndromes, and the Connecticut DPH Genomics Office has created guidelines entitled *Cancer Genomics Best Practices for Connecticut Healthcare Providers — Hereditary Breast and Ovarian Cancer Syndrome and Lynch Syndrome*.

Up to 10% of pancreatic cancers may also be due to abnormal genes, for which tests are available. Pancreatic cancer, a disease with low incidence but high mortality, causes more deaths in Connecticut than breast or prostate cancer. Since there are no evidence-based early detection tests and a disparity exists (Blacks experience greater incidence and mortality rates), monitoring the potential for the use of genetic testing for these inherited genetic mutations may be a useful approach to the control of this especially difficult type of cancer.⁶²

Genetic risk assessment information and genetic counseling objective

- Increase the proportion of people with a family history of hereditary cancers who receive genetic risk assessment information and genetic counseling (Data: TBD)⁶³

STRATEGIES

- Support efforts to make information on underlying genetic/heritable causes of common cancers and the importance of genetic counseling and early detection more readily available to the public. For example, children in families with hemochromatosis should be screened for the disease. Treatment can reduce the risk of later development of liver cancer⁶⁴
- Disseminate resources for patients regarding genetic testing, counseling, and/or public health genomics
- Certain inherited diseases can cause cirrhosis of the liver, increasing a person's risk for liver cancer. Finding and treating these diseases early in life could lower this risk

Resources

- CDC Recommendations for Hepatitis C Screening Among Adults in the United States. <https://www.cdc.gov/hepatitis/hcv/guidelinesc.htm>
- DOSE HPV: Development of Systems and Education for HPV Vaccination. <https://ebccp.cancercontrol.cancer.gov/programDetails.do?programId=25930477>
- Hepatitis B Vaccination of Adults. <https://www.cdc.gov/hepatitis/hbv/vaccadults.htm#:~:text=The%20Advisory%20Committee%20on%20Immunization,HBV%20without%20acknowledgment%20of%20a>
- <https://www.cdc.gov/vaccines/imz-managers/coverage/teenvaxview/data-reports/hpv/dashboard/2018.html>
- TeenVaxView, National Immunization Survey-Teens: 2019 Adolescent Human Papillomavirus (HPV) Vaccination Coverage Dashboard.
- <https://www.cdc.gov/vaccines/imz-managers/coverage/teenvaxview/data-reports/index.html>
- What Happens During Genetic Testing for Cancer Risk? <https://www.cancer.org/cancer/cancer-causes/genetics/what-happens-during-genetic-testing-for-cancer.html>
- National HPV Vaccination Roundtable. HPV YouTube channel. <https://www.youtube.com/channel/UCeX-D142UQHtMiw8ddW77-w>

Goal 3: Increase Screening and Early Detection of Cancer

Priority Areas:

1. Breast cancer screening and early detection
2. Colorectal cancer screening and early detection
3. Lung cancer screening and early detection
4. Cervical cancer screening and early detection
5. Prostate screening, based on shared decision-making

HIGHLIGHT:

ALIGNING WITH NATIONAL CANCER SCREENING OBJECTIVES FROM HEALTHY PEOPLE 2030⁶⁵

Every ten years since 1980, the Healthy People initiative, a project of the U.S. Department of Health and Human Services through its Office of Health Promotion and Disease Prevention, sets measurable objectives to improve the health and well-being of people nationwide. The interventions cited here from Healthy People 2030 pertain to evidence-based cancer screening using recommended guidelines to reduce new cases of cancer and cancer-related illness, disability, and death for high-burden cancers.



Healthy People 2030 Objectives

Breast Cancer Screening: Increase the proportion of females ages 50 to 74 who receive a breast cancer screening from 72.8% to 77.1%

Colorectal Screening: Increase the proportion of adults ages 50 to 75 who receive colorectal cancer screening based on the most recent guidelines from 65.2% to 74.4%

Lung Cancer: Increase the proportion of adults who receive a lung cancer screening based on the most recent guidelines from 4.5% to 7.5% (Note: USPSTF guidelines changed in March 2021, lowering the recommended starting age for lung cancer screening from 55 to 50)

Cervical Cancer Screening: Increase the proportion of females ages 21 to 65 who receive cervical cancer screening based on the most recent guidelines from 80.5% to 84.3%

Prostate Cancer: Reduce the prostate cancer death rate from 18.8 prostate cancer deaths per 100,000 males in 2018 to 16.9 per 100,000 (Note: Healthy People 2030 provides a death rate reduction objective, since screening is not recommended as an evidence-based strategy)

***Note that the target date for all objectives in the Connecticut Cancer Plan, 2021-2026 is 2026.**

DISPARITIES ALERT

- Please note that the Healthy People 2030 Objectives apply to the American population as a whole. Connecticut fares well overall relative to U.S. rates but suffers from disparities within racial and ethnic and LGBTQ groups. The overall focus of this plan is to address inequities, and many of this Plan's objectives reflect that focus
- An example of a disparities issue that merits consideration is that since Black women disproportionately experience breast cancer at younger ages, the American Cancer Society guideline of beginning screening at age 45, with the option to begin at age 40, may be a strategy that can reduce cancer outcome disparities



G-3, Priority Area 1: Breast Cancer Screening

Breast cancer screening objectives

- Increase the percentage of all women ages 50 – 74 in Connecticut who are up to date with USPSTF⁶⁶ recommended breast cancer screening from 83% to 85% (2018 BRFSS Report)
- Increase the percentage of lower-income women who are up to date with USPSTF recommended breast cancer screening from 76.2% to 85% (2016 BRFSS Report)
- Decrease the age-adjusted late-stage female breast cancer incidence rate in Connecticut from 41 to 39 per 100,000 women. (Baseline: State Cancer Profiles 2013-2017. Update available)



STRATEGIES

- Maintain and promote goals and objectives of the Connecticut Early Detection and Prevention Program (CEDPP), which consists of the Connecticut Breast and Cervical Cancer Early Detection Program (CBCCEDP) and the Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN)
- Advocate for inclusion of optional breast cancer screening module in state BRFSS
- Implement equitable and culturally appropriate evidence-based policy and system changes, such as client reminders, provider assessment and feedback, and provider reminder and recall systems
- Promote increasing the capacity for and use of lay navigators⁶⁷ or community health workers for outreach to populations of focus for dissemination of appropriate information regarding breast cancer risk factors, benefits of screening and early detection, and improved equitable and affordable access to cancer screenings
- Encourage discussion and documentation of family history to inform risk assessment, screening recommendations, and risk-appropriate referral for genetic counseling services
- Develop continuity, recovery, and resiliency plans to maintain cancer screenings during public health emergencies, with appropriate messaging, providing capacity to offer alternative modalities and delivery methods
- Encourage health systems, providers, and community health centers to combine screening reminders with vaccination clinics or other health promotion events, such as other cancer screenings
- Promote workplace wellness programs with focus on screening education and access to mobile mammography if available
- Adopt innovative outreach programs to engage women in screening, such as that piloted through pharmacists' identification and referral of cash-paying clients to refer women eligible for the Connecticut Early Detection and Prevention Program (CEDPP)
- Encourage and support screening education programs through dissemination of information at churches, bodegas, hair and nail salons, food distribution sites, community and hospital wellness events, and vaccination clinics

G-3, Priority Area 2: Colorectal Cancer (CRC) Screening

DISPARITIES ALERT

- Disparities in **colorectal cancer incidence** in Connecticut from 2013 – 2017 highlight the need to increase screening among specific groups. The rate of colorectal cancer among Hispanic men is 49.4 per 100,000, and the rate among Black men is 46.1, compared to 40.8% for non-Hispanic white men
- The mortality rates for colorectal cancer in Connecticut also show unsettling disparities between white (13.0 per 100,000) and Black men (16.7 per 100,000)
- In 2018, 78% of all CT adults 50 – 75 years old reported they ever had a sigmoidoscopy or colonoscopy, while the rate for Hispanic adults was significantly lower at 70.2%^{68 69}



Colorectal screening objectives. (2018 BRFSS data)

Please note: Screening guidelines from USPSTF and ACS now recommend that colorectal screening begin at age 45. Improvement targets provided below are given with the 2018 baselines for comparison purposes (starting age of 50). As BRFSS baselines incorporate the new recommended age of initiation of screening, these targets will be modified.

- Increase the percentage of adults ages 50–75 in Connecticut who are up to date with USPSTF recommended colorectal cancer screening from 78% to 80.0%
- Increase the percentage of Black adults ages 50–75 in Connecticut who are up to date with USPSTF recommended colorectal cancer screening from 75.5% to 80%
- Increase the percentage of Hispanic adults ages 50–75 in Connecticut who are up to date with USPSTF recommended colorectal cancer screening from 70.2% to 80%

STRATEGIES

- Monitor and track the rates of cancer screenings (fecal immunochemical test (FIT) kits and colonoscopies) and track disparities
- Monitor provider referrals and screening uptake in age groups that are now recommended to begin screening at age 45
- Promote low or no-cost screening programs, including FIT kit utilization, to improve screening affordability and acceptability. Provide education on how to use kits and telephone support to enhance completion and return rate. Provide specific messaging around test type and frequency of test since they differ in that FIT is recommended for annual testing and colonoscopy is every 10 years for average risk
- Promote public awareness of new guidelines lowering recommended starting age of CRC screening to 45
- Encourage systems, providers, community health centers to reach out annually to members starting at age 45 with information about colorectal cancer testing, including colonoscopy. Provide FIT kits and instructions for those not choosing colonoscopy
- Encourage health systems, providers, and community health centers to screen for social determinant of health barriers and offer navigation when colonoscopies are indicated
- Promote systems changes to increase the capacity for and use of community health workers or health navigators for outreach to populations of focus for health education and improved utilization of cancer screenings
- Implement evidence-based physician and employer reminder systems and incentives for routine cancer screenings.
- Establish commitments from organizations to offer annual colorectal screening in a trusted setting identified by populations of focus
- Develop continuity, recovery, and resiliency plans to maintain cancer screenings during public health emergencies, with appropriate messaging, providing capacity to offer alternative modalities and delivery methods
- Encourage health systems, providers, and community health centers to combine CRC screening reminders with vaccination clinics or other health promotion events, such as other cancer screenings, assuring that screening recipients are linked with providers for appropriate follow-up
- Promote workplace wellness programs, with focus on screening education
- Advocate for continued inclusion of optional colorectal cancer screening module in state BRFSS

G-3, Priority Area 3: Lung Cancer Screening

DISPARITIES ALERT

- Screening for lung cancer with annual low-dose CT (LDCT) scans among those at high risk can reduce the lung cancer death rate by up to 20% by detecting tumors at early stages when they are more likely to be curable. In Connecticut, 7.6% of those at high risk were screened, which was significantly higher than the national rate of 5.7%
- The early lung cancer diagnosis rate is 23.5% among Blacks in Connecticut, and while higher than the rate of 19.7% among Black Americans nationally, it is significantly lower than the rate of 27.6% among whites in Connecticut⁷⁰



Lung cancer objectives

- Increase the percentage of Connecticut adults at risk who are screened from 7.6% to 10%^{71 72} (North American Association of Central Cancer Registries (NAACCR 2019))
- Monitor the results of the 2022 BRFSS survey question on lung cancer screening
- Decrease the state age-adjusted rate of lung cancer cases diagnosed at the distant stage from 41 to 39 per 100,000 persons (Baseline: State Cancer Profiles, 2013–2017)
- Decrease the age-adjusted lung cancer mortality rate in Connecticut from 30 to 28 per 100,000 persons (Baseline: State Cancer Profiles, 2018)

*In 2021, USPSTF changed the recommended starting age range from 55 – 80 years of age to 50 – 80 years of age and changed the smoking history from 30 pack years to 20 pack years.

STRATEGIES

- Identify and address barriers to annual screening referrals by primary care clinicians
- Develop outreach to referring providers and patients that addresses the importance of **annual** screening for those eligible
- Send automated letter to qualifying smokers and ex-smokers
- Support comprehensive lung cancer screening programs across the state, encompassing these elements: individualized lung cancer risk evaluation, shared decision-making conversation on the risks and benefits of screening, smoking cessation counseling and treatment, LDCT scan or other tests, if indicated management recommendations of any findings, continuity of care, and ongoing monitoring
- Reduce structural barriers, such as financial and transportation issues, to improve equitable and affordable access to screening for populations of focus
- Recognize and address stigma associated with lung cancer risk
- Create a paper and digital (app/website) educational tool
- Provide education surrounding lung cancer risks (smoking, radon, radiation) focusing on risk reduction through tobacco cessation and home radon testing (ensure that underserved populations are addressed)
- Promote the use of culturally appropriate public education, patient and lay navigation, and health equity strategies
- Encourage referral to tobacco cessation for smokers and users of vaping products
- Encourage use of public services announcements to play on closed loop TV in physicians' offices
- Partner with Connecticut Quitline to include addition of information on lung cancer screening in Welcome Kit information⁷³
- Encourage provision of radon testing information to all residents, with additional risk information to be provided to current or past smokers
- Endorse physician practice staffing model that can make screening checklists less time consuming for the physician, such as the use of a practice care coordinator or health coach
 - Provide toolkits to primary care clinicians with guidance on the shared decision-making process and insurance codes and billing for the decision support appointment
 - Provide templates for patient education materials in English and Spanish, explaining current screening recommendations and how to use the USPSTF guidelines' "pack-history calculation"⁷⁴
 - Promote professional education about lung cancer screening indications and shared decision-making
 - Advocate for EHR (electronic health record) automated reminder system to identify patients who might qualify for lung cancer screening
- Advocate for continued inclusion of lung cancer screening module in state BRFSS⁷⁵

G- 3, Priority Area 4: Cervical Cancer Screening

Cervical cancer screening objectives

- Increase the percentage of women ages 21 – 65 from populations of focus in Connecticut who are up to date with USPSTF recommended cervical cancer screening to 84%. The uninsured and lower income populations have rates of 69% and 77.6% respectively, while Connecticut's overall rate is 84%
- Decrease the age-adjusted invasive cervical cancer incidence rate in Connecticut from 4.5 to 4.3 per 100,000 women (State Cancer Profiles, 2018)



STRATEGIES

- Implement equitable and culturally appropriate evidence-based policy and system changes, such as client reminders, provider assessment and feedback, and provider reminder and recall systems
- Monitor and promote professional education and the use of current screening guidelines regarding those persons fully HPV-vaccinated
- Promote the use of culturally appropriate public education, community health workers, lay navigation, messaging, and health equity strategies
- Reduce structural barriers, such as financial and transportation issues, to improve equitable and affordable access to screening for populations of focus
- Advocate for continued inclusion of cervical cancer screening module in state BRFSS

G-3, Priority Area 5: Prostate Screening

Prostate cancer screening objectives⁷⁶

- Reduce the prostate cancer death rate from 17 to 16 per 100,000 men (State Cancer Profiles, 2018)
- Reduce gap in stage at diagnosis between Black and white men

Note: Prostate cancer screening has not been recommended by the USPSTF, which determined overall benefits do not outweigh potential harms.⁷⁷ Therefore, the recommendation is that men have a conversation, using a shared decision-making approach, with their provider specific to their own risk factors. Shared decision-making (SDM) is a collaborative discussion between patient and clinician to assess risks and benefits associated with an intervention for which there may be no clear evidence basis of benefit. The American Cancer Society suggests that discussion about screening should take place at:⁷⁸

- Age 50 for men who are at average risk of prostate cancer and are expected to live at least 10 more years
- Age 45 for men at high risk of developing prostate cancer. This includes African Americans and men who have a first-degree relative (father or brother) diagnosed with prostate cancer at an early age (younger than age 65)
- Age 40 for men at even higher risk (those with more than one first-degree relative who had prostate cancer at an early age)



STRATEGIES

- Disseminate results from community-based, culturally appropriate shared decision-making education programs addressing prostate cancer risks and the risks and benefits associated with prostate screening methods
- Promote use of shared decision-making aids, including information on the effectiveness of close monitoring of prostate cancer to reduce the prostate cancer death rate in men who are diagnosed early^{79 80}
- Focus information on the higher risks faced by Black and Hispanic men and the benefits and risks of testing and the use of culturally appropriate shared decision-making aids, including information on the effectiveness of close monitoring of prostate cancer, to reduce the prostate cancer death rate in men who are diagnosed early⁸¹
- Monitor and promote professional education and the use of current screening guidelines
- Encourage discussion and documentation of family history to inform risk assessment, screening recommendations, and risk-appropriate referral for genetic services
- Advocate for continued inclusion of prostate cancer screening module in state BRFSS
- Advocate for inclusion of prostate cancer decision-making module in state BRFSS

General Early Detection Resources

- State Cancer Profiles. NIH. Quick Profile: Connecticut. <https://statecancerprofiles.cancer.gov/quick-profiles/index.php?tabSelected=4&statename=connecticut#t=1>

Colon Cancer Resources

- Colorectal Cancer Facts & Figures 2020-2022. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/colorectal-cancer-facts-and-figures/colorectal-cancer-facts-and-figures-2020-2022.pdf>
- Colorectal Cancer Screening: A State-By State Snapshot. NCCRT. https://nccrt.org/index.php?gf-download=2020%2F10%2FState-CRC-Screening-Landscape_NCCRT.pdf&form-id=12&field-id=23&hash=e650bd5d04da96258fcef913ca437570c6a5445c185936b77ef32277ed4760d7
- Quick Facts: Colorectal Cancer Screening in Connecticut. <https://www.cdc.gov/cancer/ncccp/screening-rates/pdf/colorectal-cancer-screening-connecticut-508.pdf>
- What Can Comprehensive Cancer Control Coalitions Do to Advance 80% In Every Community? What Can Comprehensive Cancer Control Coalitions Do to ...

Lung Cancer Resources for Consumers

- Can Lung Cancer Be Found Early? American Cancer Society. <https://www.cancer.org/cancer/lung-cancer/detection-diagnosis-staging/detection.html>
- Is Lung Cancer Screening Right for Me? (Agency for Healthcare Research and Quality)
- Lung Cancer Screening Resources: Saved By The Scan. American Lung Association. <https://www.lung.org/lung-health-diseases/lung-disease-lookup/lung-cancer/saved-by-the-scan/resources>
- Lung Cancer Screening (National Cancer Institute)
- Lung Cancer Screening. American Thoracic Society. <https://www.thoracic.org/patients/patient-resources/lung-cancer-screening.php>
- Risk and Early Detection. Cancer Alliance: www.lungcanceralliance.org/risk-early-detection/
- Screening for Lung Cancer (JAMA)
- Who Should be Screened for Lung Cancer? CDC. https://www.cdc.gov/cancer/lung/basic_info/screening.htm
- <https://www.screenyourlungs.org/>
- National Lung Cancer Roundtable. <https://nlcrt.org/about/task-groups/state-based-initiatives-task-group/>

Lung Cancer Resources for Health Care Providers

- Implementation of Lung Cancer Screening: Proceedings of a Workshop (The National Academies of Sciences, Engineering, and Medicine)
- Lung Cancer Screening Resources. American Lung Association. <https://www.lung.org/lung-health-diseases/lung-disease-lookup/lung-cancer/saved-by-the-scan/resources/state-lung-cancer-screening>
- Lung Cancer Screening: A Clinician's Checklist (Agency for Healthcare Research and Quality)
- Lung Cancer Screening: A Summary Guide for Primary Care Clinicians(Agency for Healthcare Research and Quality)
- Management of lung nodules and lung cancer screening during the COVID-19 pandemic. Mazzone PJ, Gould MK, Arenberg DA, Chen AC, Choi HK, Detterbeck FC, et al. CHEST Expert Panel Report. Chest 2020;158(1):406–415. DOI
- Screening for lung cancer: CHEST guideline and expert panel report. Mazzone PJ, Silvestri GA, Patel S, Kanne JP, Kinsinger LS, Wiener RS, Soo Hoo G, Detterbeck FC. Chest 2018;153(4):954–985. DOI: 10.1016/j.chest.2018.01.016. external icon
- Reducing the Risk from Radon: Information and Interventions. http://www.radonleaders.org/resources/reducingtheriskfromradon?utm_source=Widget2018
- USPSTF Final Recommendation Statement Lung Cancer: Screening. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/lung-cancer-screening>

Goal 4: High-Quality Cancer Treatment is Available and Accessible to All

Priority Areas:

1. High-quality, evidence-based diagnostic and treatment services adherent to national standards
2. Supportive services to reduce barriers to optimal care
3. Precision, targeted, or personalized cancer treatment
4. Clinical trials

WHY THIS IS IMPORTANT

Health care quality is measured by evolving accreditation mechanisms carried out by several different national organizations, such as the American College of Surgeons' Commission on Cancer (CoC), the National Accreditation Program for Breast Centers (NAPBC), the American Society of Clinical Oncology (ASCO), the Quality Oncology Practice Initiative (QOPI), and the Center to Advance Palliative Care (CAPC).

Out of 27 Connecticut acute care hospitals, 18 are accredited by the American College of Surgeons' Commission on Cancer. (April 2, 2021) There are 11 NAPBC accredited Breast Centers in the state.⁸²

The Quality Oncology Practice Initiative (QOPI®) is a quality improvement program for outpatient oncology practices, sponsored by ASCO. QOPI certification may qualify for Merit-based Incentive Payment System (MIPS) Reporting. (See Major and Emerging Issues Section.)⁸³

Standard 7.3 of the 2020 CoC Standards for cancer center accreditation is a quality improvement (QI) initiative requiring analysis of a problem followed by a planned solution. Reports on the status of the QI initiative must be given to the cancer committee at least twice each calendar year and documented in the cancer committee minutes.^{84, 85}

G-4, Priority Area 1: High-Quality, Evidence-Based Diagnostic and Treatment Services

Access and quality objectives

- Promote and support the efforts of Connecticut hospitals to meet the standards of the American College of Surgeons' Commission on Cancer (CoC)
- Facilitate collaboration on CoC (Standard 7.3, 2020 Standards) required annual Quality Improvement projects addressing equity improvement⁸⁶
- Encourage systems to adhere to National Comprehensive Cancer Network (NCCN) Guidelines which are a comprehensive set of guidelines detailing the sequential clinical management decisions and interventions that currently apply to 97% of cancers⁸⁷ affecting patients in the United States
- Encourage systems to adhere to The American Society of Clinical Oncology (ASCO) clinical practice guidelines addressing specific clinical situations or use of treatment modalities⁸⁸

STRATEGIES

- Promote use of the oncology care model and medical home approaches to cancer care
- Promote dissemination of improvement projects reports
- Support efforts to reduce disparities in access to treatment related to co-morbidities for underserved populations due to geography, income, and insurance status, etc. through policy, systems, and environmental changes

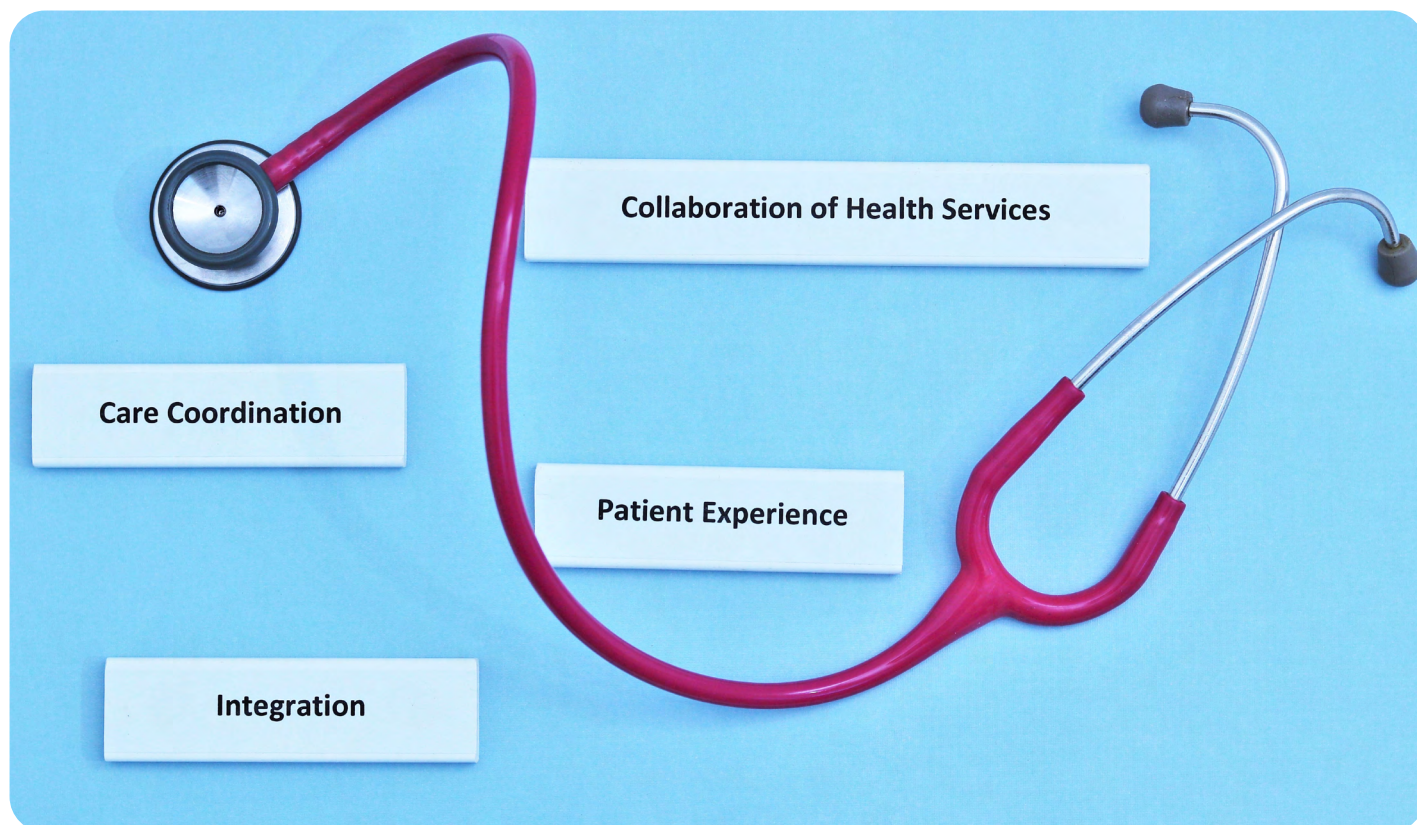


Connecticut Spotlight

ONCOLOGY CARE MODEL

The Center for Medicare & Medicaid Innovation (CMS Innovation Center) designed a payment delivery model to improve the effectiveness and efficiency of specialty care called the Oncology Care Model (OCM). It is designed to provide higher quality coordinated oncology care at the same or lower cost to Medicare. Practices participating in OCM commit to providing enhanced services to Medicare beneficiaries such as care coordination, navigation, and adherence to national treatment guidelines for care.⁸⁹

There are four participating sites in Connecticut out of 192 nationwide: Starling Physicians in Wethersfield, Hematology Oncology in Stamford, Eastern Connecticut Hematology and Oncology in Norwich, and the Yale Medical Group, Smilow Cancer Hospital in New Haven.



G-4, Priority Area 2: Supportive Services to Reduce Barriers to Optimal Care

WHY THIS IS IMPORTANT

Although CoC no longer requires cancer centers to have patient navigation programs, patient navigation is one way to address barriers to care, which is a major focus of CoC quality standards.⁹⁰

Patient navigation has been shown to reduce the time to diagnosis and treatment and has improved treatment adherence, patient quality of life, patient knowledge regarding their cancer, and their communication with their healthcare team. Survival benefits have also been seen with advanced cancer patients, particularly in African American lung or pancreatic patients.⁹¹



Support services objectives

- Increase the percentage of cancer patients who receive navigation through cancer treatment (Data: TBD)
- Increase the percentage of cancer patients who have ever received a treatment summary or survivorship care plan detailing follow-up guidelines (Data to be analyzed from BRFSS2020 report)

STRATEGIES

- Support programs to identify barriers to care and address them with culturally appropriate interventions
- Monitor percentage of patients receiving navigation service
- Promote health navigator programs in the community to address barriers to care
- Promote patient navigation or care coordination services, ensuring appropriate referrals to meet financial, spiritual, language, mental health, nutritional, substance abuse counseling, and other needs
- Promotion enhancement of health insurance coverage for cancer care, treatment, and supportive services
- Promote access to telemedicine and telehealth

G-4, Priority Area 3: Precision, Targeted, or Personalized Cancer Treatment

WHY THIS IS IMPORTANT

Targeted therapy is a type of cancer treatment that focuses on proteins that control cancer cells' growth and spread. Changes in the DNA that cause cancer provide clues for researchers to study promising drug treatments that target specific genes and proteins.⁹² Many clinical trials are studying targeted therapies for different types of cancer. Pharmacogenomics is an emerging area addressing how individual genetic variations influence drug efficacy and toxicity.

Precision medicine objective⁹³

- Increase the percentage of cancer patients receiving targeted therapies (Data: TBD)



STRATEGIES

- Support academic research initiatives designed to improve cancer treatment through implementation of evidence-based interventions, with an emphasis on reducing barriers to care for populations of focus⁹⁴
- Support efforts to increase participation in biorepositories that inform research programs and potentially improve future cancer treatments⁹⁵

G-4, Priority Area 4: Participation in Clinical Trials

Clinical trials objective

- Increase enrollment of Connecticut residents, especially those representing populations of focus (Data: TBD)

STRATEGIES

- Educate professionals and the public about the importance of clinical trials of cancer prevention and treatment modalities using culturally and linguistically appropriate methods⁹⁶
- Promote and support increased and equitable access to participation in cancer-related clinical trials, addressing barriers to participation in clinical trials
- Promote the establishment of a system to monitor the level of participation in clinical trials by people living in Connecticut diagnosed with cancer
- Disseminate information about available clinical trials



Resources

- U.S. National Library of Medicine. ClinicalTrials.gov. <https://support.nlm.nih.gov/knowledgebase/category/?id=CAT-01242>
- Yale Cancer Center. Clinical Trials: Phase I Program. <https://www.yalecancercenter.org/patient/trials/phase/>
- Commission on Cancer (CoC) Accreditation. <https://www.facs.org/search/cancer-programs?state=CT>
- CT Mirror. Health officials use census data to reach uninsured. Access Health Ct. <https://ctmirror.org/2019/10/29/as-open-enrollment-approaches-health-officials-use-census-data-to-reach-uninsured/>
- Oncology Care Model, CMS Innovation Center. <https://innovation.cms.gov/initiatives/oncology-care>

Goal 5. Optimize Quality of Life for Cancer Survivors

Priority Areas:

1. Psychosocial support services
2. Survivorship services
3. Palliative care
4. Serious Illness/end of life/hospice care

G-5, Priority Area 1: Psychosocial Support

WHY THIS IS IMPORTANT

Psychological distress affects up to 75% of cancer survivors. Although distress screening is recommended by the Commission on Cancer (CoC) and National Comprehensive Care Network (NCCN) Guidelines, fewer than one third of survivors report having talked to their clinicians about their psychosocial concerns.⁹⁷

Since 2019, CoC accredited cancer centers have been required to develop and implement a psychosocial distress screening and referral program, but it is estimated that only about half of patients are screened.⁹⁸

Psychosocial support objectives

- Increase implementation of psychosocial/distress evaluation tools for use in inpatient and outpatient settings (Data: TBD)
- Increase number of available patient and caregiver support groups, focusing on culturally appropriate approaches to encourage access by members of populations of focus



STRATEGIES

- Promote psychosocial distress training of providers through CME opportunities such as that developed by CDC through the National Association of Chronic Disease Directors⁹⁹
- Share best practices through educational events/annual meeting for providers and cancer center staff

Resources

- Journal of National Comprehensive Care Network published Oct. 2019. Distress Management, Version 3.2019, NCCN Clinical Practice Guidelines in Oncology. <https://jnccn.org/view/journals/jnccn/17/10/article-p1229.xml>
- NCCN Guidelines for Patients Distress During Cancer Care, 2020.
- Provider Education Training to Improve Mental Health Care of Cancer Survivors, CDC.
- <https://www.cdc.gov/cancer/survivors/health-care-providers/mental-health-care-prov-ed.htm>
- Provider Education for Mental Health Care of Cancer Survivors. National Association of Chronic Disease Directors. <https://simulations.kognito.com/pemhccs/>

G-5, Priority Area 2: Survivorship Services

WHY THIS IS IMPORTANT

An estimated 16.9 million people with a history of cancer were alive on January 1, 2019. By January 2030, this number will exceed 22 million. Cancer survivors who minimize their exposure to cancer risk factors improve the quality of their lives and reduce the risk of cancer recurrence or progression and the incidence of additional cancers.¹⁰⁰

Survivorship objectives

(Note: Tracking progress on these objectives will depend on data from the continuing inclusion of an optional BRFSS survivorship module.)

- Increase the proportion of cancer survivors who engage in healthy living behaviors
- Increase the proportion of cancer survivors who report that during the past 30 days, poor physical or mental health did not keep them from doing usual activities on any days
- Decrease the proportion of cancer survivors who report that they currently have physical pain from cancer or treatment from 11.6% to 10% (2020 BRFSS Survivorship Preliminary Data)
- Increase the proportion of cancer survivors who report receiving a written summary of all cancer treatments received (from 49.2 % to 54.4%) and written instructions about where to return or who to see for routine cancer checkups after completing treatment (2020 BRFSS Survivorship Preliminary Data)
- Increase awareness of special needs of survivors of childhood and young adult cancers¹⁰¹
- Increase proportion of cancer survivors who, in partnership with their primary care provider, adhere to survivorship guidelines regarding monitoring and screening for late effects
- Increase awareness of special needs of survivors of childhood and young adult cancers
- Improve process of transition from oncology care to primary care, especially for childhood cancer survivors



First Person Point of View

“With the use of navigators, connect survivors to local groups, support systems in person or through social media, annual event to promote survivorship.”

—Participant at CCP Annual Meeting, 2019

STRATEGIES

- Address psychosocial needs of family caregivers through increased supportive services programming by health and community agencies, including the use of community health workers
- Address risk factors for cancer survivors to improve quality of life and reduce risk of cancer recurrence or progression (See Healthy Living objectives in Chapter 2)
- Advocate for continued inclusion of optional Cancer Survivorship modules in state BRFSS
- Analyze results of 2020 BRFSS optional Cancer Survivorship module to identify needs¹⁰²
- Collaborate with YMCAs across the state to increase participation in the LIVESTRONG at the YMCA program for cancer survivors through increased provider referrals and promotion through survivor support groups
- Educate patients on the value of treatment summaries and survivorship care plans
- Encourage community-based self-management workshops for cancer survivors, including promotion of physical activity programs, weight management, and healthy eating
- Promote alcohol behavioral counseling referrals and interventions for cancer patients who continue to use alcohol at any stage during and after cancer diagnosis
- Promote systems changes to integrate survivor care plans into systems of care
- Provide assistance to the largest employers in the state to incorporate and promote evidence-based obesity, nutrition, and physical activity interventions into worksite wellness programs, with a specific focus on cancer survivors
- Provide professional education to providers regarding use of Survivorship Care Plans, including elements such as:
 - psychosocial issues and behavioral counseling interventions, referrals to behavioral counseling services, the availability of support and survivorship groups, the importance of healthy behaviors and the risks of tobacco and alcohol use affecting the reduction of cancer recurrence, and long-term and late effects of cancer and its treatment on survivors' physical and psychosocial well-being
- Support advance care planning for cancer survivors and their families through educational initiatives and including content in survivorship groups
- Train health systems providers to assess, advise, and refer cancer survivors to physical activity programs and to utilize "exercise prescriptions" to improve fatigue, anxiety, depression, physical function, and quality of life
- Work with hospitals, health systems, and cancer centers to establish survivorship priority programs as per CoC guidelines that focus on enhancing survivors' health and quality of life
- Develop or support programs addressing the needs of childhood cancer survivors, including facilitating the transition from oncology care to primary care

REACH FOR THE STARS SURVIVORSHIP PROGRAM AT CONNECTICUT CHILDREN'S MEDICAL CENTER

The team in the Center for Cancer and Blood Disorders at the Connecticut Children's Medical Centers care for patients and families throughout the cancer continuum, from diagnosis through treatment and beyond. This includes care after treatment completion: monitoring for relapse, addressing short- and long-term side effects of cancer and its treatment, and promoting health and wellness throughout the lifespan. By addressing specific concerns, providing anticipatory guidance, and increasing the support given to children and families, nurses and doctors, in collaboration with the psychosocial health care team of social workers, psychologists, and child life specialists, strive to ease survivors' transition to and through cancer survivorship. The aim of the two survivorship programs is to promote survivors' physical and psychosocial well-being and improve reintegration into family life and the community.

A long-term survivorship clinic called "REACH for the STARS" for survivors begins 2 – 5 years after diagnosis and continues through early adulthood. An end-of-treatment transition program for survivors called "Shooting for the STARS" was recently established and is offered in the first weeks to months after completing cancer treatment. Both programs are evidence-based and offer comprehensive multidisciplinary services and support, which include medical, educational, and psychosocial supportive care for survivors and parents.

Resources

- Cancer Survivors. CDC. <https://www.cdc.gov/cancer/survivors/index.htm>
- Information for Health Care Providers. Survivorship Care Plans. CDC. Comprehensive Cancer Control Plans: Addressing Risk Factors for Survivors:
 - <https://www.cdc.gov/cancer/survivors/health-care-providers/index.htm>
 - <https://www.cdc.gov/cancer/survivors/health-care-providers/obesity-wellness.htm>
 - <https://www.cdc.gov/cancer/survivors/health-care-providers/tobacco-use.htm>
- Optimal Resources for Cancer Care 2020 Standards. American College of Surgeons, Commission on Cancer, Effective January 2020 Updated February 2021. [optimal_resources_for_cancer_care_2020_standards.ashx \(facs.org\)](https://www.facs.org/standards/ashx)
- Comprehensive Cancer Control Plan. Addressing Risk Factors for Cancer Survivors. Comprehensive Cancer Control National Partnership. <https://www.acs4ccc.org/wp-content/uploads/2021/01/CCC-Tip-Sheet-Survivors-v07-FF.pdf>
- REACH for the STARS Survivorship Program - Connecticut Children's

G-5, Priority Area 3: Palliative Care

WHY THIS IS IMPORTANT

- According to the American Society of Clinical Oncology (ASCO), palliative care is used to ease symptoms and side effects and manage any challenges patients experience before, during, and after cancer treatment. ASCO also notes “substantial evidence demonstrates that palliative care—when combined with standard cancer care as the main focus of care—leads to better patient and caregiver outcomes”
- In addition, ASCO reports “earlier involvement of palliative care also leads to more appropriate referral to and use of hospice care and reduced use of futile intensive care”
- Patients with invasive cancers who receive palliative care along with cancer treatments tend to enjoy better quality of life and live longer^{103 104 105 106 107}

Palliative care objectives

- Increase the proportion of cancer patients and survivors who report that their pain is currently under control (2020 BRFSS data to be baseline)
- Maintain Connecticut’s “A” grade on the Center to Advance Palliative Care Report Card

First Person Point of View

“ Though I have good doctors, I ended up losing over 60 pounds and ended up seriously ill in the Hospital. I was treated well for the cancer, though found the Center extremely uninformative (unless you knew the questions to ask) when it came to the various approaches to pain management and adverse body reactions to chemo.”

—June 2020 response to needs assessment survey

STRATEGIES

- Promote and support a systematic approach to monitor, disseminate, and utilize data trends to advocate for high-quality palliative care
- Promote and support system changes that strengthen the quality of palliative care through partnerships with providers and community members from across the state, including those addressing the needs of pediatric patients
- Build workforce capacity in response to analysis of data tracking the number of healthcare professionals certified in palliative care
- Analyze data trends to identify barriers and advocate for policy and system changes that improve accessibility and quality of palliative care in all settings
- Advocate for increased federal, state, and private funding, resources, and research related to palliative care, especially for populations of focus
- Support development of collaborative initiatives that provide culturally appropriate palliative care education in all settings, including colleges, hospitals, out-patient settings, long-term care, pediatric care, and veteran care, to strengthen the quality and utilization of palliative and hospice care in the state
- Support policy and system changes that increase the use of advanced care planning by residents of Connecticut, including culturally and linguistically appropriate public education programs about end-of-life decision-making (e.g., Medical Orders for Life-Sustaining Treatment or MOLST) and other advanced directive planning efforts
- Align efforts to support recommendations of the Connecticut State Palliative Care Advisory Council
- Encourage state health insurance regulators to support palliative care, such as requiring disability plans to offer optional coverage of palliative care services without the need for beneficiaries to demonstrate that they are homebound
- Advocate for excluding palliative care from opioid prescribing rules¹⁰⁸

Resources

- Advancing Palliative Care for Adults with Serious Illness: A National Review of State Palliative Care Policies and Programs. Rachel Donlon, Kitty Purington, and Natalie Williams. Advancing Palliative Care for Adults with Serious Illness - The ...
- Report to the Commissioner of Public Health and the Connecticut General Assembly on Palliative Care 2017. <https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/Government-Relations/Palliative-Care-Agenda-and-Minutes/Report-2017.pdf>

G-5, Priority Area 4: Serious Illness/End of Life/Hospice Care

WHY THIS IS IMPORTANT

Connecticut is currently ranked 30th among states by percentage of Medicare decedents who receive hospice benefits.

In 2018, a substantial majority of Medicare hospice patients were Caucasian. While improvements have occurred since 2014, Black and Hispanic Medicare beneficiaries who receive hospice services are underrepresented, compared with white Medicare beneficiaries.

End of life/hospice objectives

- Increase the percentage of Medicare decedents (Medicare beneficiaries who die while receiving Medicare benefits) who received hospice benefits from 48.6% (2018 data) to 53%
- Increase the percentage of residents who report having an advance directive in place (Data: TBD)



First Person Point of View

“[We need to] increase hospice services. Families are left to manage this, and they are not healthcare professionals.”

—Participant at Dec. 2019 CCP Annual Meeting

STRATEGIES

- Promote informed decision-making for End-of-Life (EOL) care through consumer and provider education about high-quality EOL care alternatives, such as palliative care and hospice
- Work with the Connecticut Coalition for Serious Illness to identify the current state of resources and support for advance care planning in Connecticut and to make recommendations and initiatives to share best practices
- Work with state partners to support surveying agency and staff needs and gaps in pediatric palliative care
- Work collaboratively with other state initiatives to enhance serious illness care through improved education at the professional level for palliative care and advanced care planning
- Advocate to ensure promotion of appropriate, timely hospice referrals while supporting informed decision-making and choice
- Promote education about MOLST
- Support the Conversation Project, a public engagement initiative with a goal of helping everyone talk about their wishes for care through the end of life¹⁰⁹

MEDICAL ORDERS FOR LIFE SUSTAINING TRAINING (MOLST)

Patients at the end of life or having a serious life threatening and/or progressive illness may have completed living wills and advance directives, but may still benefit from having a MOLST, an optional additional planning document. The MOLST form documents patients' decisions in a clear manner that can be quickly understood by all providers, including first responders and emergency medical services (EMS) personnel.^{110 111 112}

End of Life Resources

- America's Care of Serious Illness: A State-by-State Report Card on Access to Palliative Care in Our Nation's Hospitals 2019. https://reportcard.capc.org/wp-content/uploads/2020/05/CAPC_State-by-State-Report-Card_051120.pdf
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In Conclusion

The Connecticut Cancer Plan, 2021-2026 reflects a commitment to moving toward a future marked less by disparity but rather by more progress toward cancer control equity in Connecticut. Individual and organizational Partnership members are urged to examine the plan to identify specific goals, objectives, and strategies that will advance their own work while fitting into this statewide approach. Committed partners working toward this common cause infuse the effort with synergy and the power of unity to effectively reduce the burden of cancer and improve health equity in Connecticut.

Please refer to What You Can Do ([see page 8](#)) to see how you and your organization can be a part of this statewide effort to reduce the burden of cancer in Connecticut.

Acknowledgements

We would like to acknowledge the contributions of the Connecticut Cancer Partnership board and committee members past and present for their input into the development of this plan. This version builds upon earlier versions which were the result of hard work of long-serving, dedicated board members, among them Linda Mowad, Vince Barbetta, Andrew Salner, and Marion Morra. We would also like to thank, among many others, the 2019 Strategic Planning Committee members Sue Ann Maresca, Tom Blank, Carol Steinke, Maggie Litwin, Lynne Basilio, Kaylyn Taylor, Peter Greenwald, Bruce Gould, Juana Adams, and Diane Morganthaler.

Among the many subject matter experts and staff who guided the development of this plan and reviewed its content, a great debt of gratitude is owed to Amy Griffin, Lisa McCooey, Kathryn Shuttleworth, Lou Gonsalves, Beth Jones, Sarah Shafir, and Brenda Cartmel.

This plan is dedicated to the memory of Linda Mowad, longtime Connecticut Cancer Partnership Board of Directors member and Chair and in honor of all Connecticut residents affected by cancer.

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