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Dedication

The Ohio Partners for Cancer Control (OPCC) dedicates this plan to the many Ohioans whose lives have been and will be impacted by cancer. OPCC members themselves have been impacted by cancer, and the loss of some OPCC members and friends who graciously shared their stories as part of this plan highlights the importance of the work outlined. Long-time OPCC member, friend, and cancer survivorship advocate Tori Geib was instrumental in the development of the “Quality of Life for Persons Affected by Cancer” section of the plan; she inspired many to join in this work.

In Memory of Tori

Tori Geib was a young woman who faced metastatic breast cancer incredibly bravely. She advocated for herself and others at personal, community, state, and national legislative levels. Despite all the hurdles she faced, Tori’s outlook and optimism kept her focused, grounded, caring, and hopeful. She influenced others to participate and act compassionately. She developed and advocated for many successful professional and community activities.

Tori’s friend and colleague, Dr. Joe Hofmeister, describes her contribution to Ohioans impacted by cancer: “I cannot begin to comprehend how many cancer patients’, caregivers’, and healthcare workers’ lives she changed. I viewed her as a role model and a profound influence on my career as a physician, author, and father. I cannot express my gratitude for the random interaction at Cancer Support Community Central, Ohio’s charity event, when Tori walked into my life and became my friend. Tori will be dearly missed but never forgotten. She exemplified that you never truly know what will happen in life, what will happen next, but regardless, embrace what is important to you and what is next. I am forever grateful for her and the lessons she taught me.”
Dear Ohioans,

We are excited to present Ohio’s new 2021-2030 Cancer Control Plan. We dedicate this plan to all Ohioans whose lives have been affected by cancer: previvors (someone with an increased risk of inherited cancer, but does not have a diagnosis), survivors, caregivers, beloved friends and family, and those who have died. This plan was created with contributions and input from a diverse group of passionate and dedicated individuals who volunteered their time and expertise. The creation of this plan took place in 2020. In this unprecedented year of a global pandemic and racial unrest, we were committed to making health equity a priority of this new plan to ensure ALL Ohioans have access to care. The plan has set forth clear goals, comprehensive objectives, and detailed strategies for addressing primary prevention, early detection, and quality of life for people affected by cancer. In Ohio, more than 74,000 cancer cases were diagnosed in 2017, the most current data available during the development of this plan. Cancer claimed the lives of over 25,000 Ohioans, which is 12% higher than the U.S. rate. Over the next 10 years, our call to action is for you to join us in our vision of a cancer-free future for all Ohioans. It has been an honor to lead Ohio in creating this amazing plan. Thank you so much for this opportunity.

In Hope,

Lindsey Byrne, Executive Co-Chair, OPCC

Angie Santangelo, Executive Co-Chair, OPCC
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Executive Summary

The 2021–2030 Ohio Comprehensive Cancer Control Plan (Cancer Plan) is a strategic plan for Ohio aimed at reducing the cancer burden in the state. Cancer impacts many Ohioans, with 74,000 cases diagnosed in 2017, and is still the second leading cause of death in Ohio.

The development of the Cancer Plan was led by the Ohio Partners for Cancer Control (OPCC), Ohio’s cancer coalition. The Cancer Plan was developed by a diverse group of stakeholders (e.g., cancer survivors, caregivers, friends, public health professionals, healthcare providers, advocates, educators, researchers, support agencies) who are committed to addressing cancer. These stakeholders formed 17 workgroups to develop objectives and strategies related to numerous aspects of cancer in Ohio. This plan, with 49 objectives, is the most comprehensive plan yet developed by OPCC and is intended to serve as a roadmap for the prevention and control of cancer for Ohio.

The plan is organized into three goal areas: primary prevention, early detection, and quality of life for persons affected by cancer. All objectives within these goal areas are measurable and supported by data. Each objective is supported by evidence-based strategies, with at least one strategy focusing on health equity.

Primary Prevention
The first goal is to prevent cancer from occurring, and 22 objectives were developed to support this goal. Topics included in this goal area are cancer genetics, exposure to environmental carcinogens, liver cancer, physical activity, nutrition, obesity, tobacco use, skin cancer and ultraviolet exposure, and vaccines for cancer prevention.

Early Detection
The second goal of the Cancer Plan is to detect cancer at its earliest stage; 13 objectives were developed to address this goal. Topics included in this goal area are breast cancer, cervical cancer, colorectal cancer, lung cancer, and prostate cancer.

Quality of Life for Persons Affected by Cancer
The third goal is to optimize the well-being of every person impacted by cancer. Workgroups developed 14 objectives to support this goal. Topics included in this goal area are cancer and aging, delivery of patient-centered services, financial burden and barriers, palliative care and hospice care, and pediatric cancer.

This Cancer Plan is much larger than what any one organization or individual can accomplish. It was developed with the knowledge that the burden of cancer in Ohio can only be reduced when many organizations and individuals work together to achieve these common goals.
Introduction

Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. Cancer is the second leading cause of death in both Ohio and the United States. In Ohio, more than 74,000 cancer cases were diagnosed and reported to Ohio's central cancer registry in 2017, and cancer claimed the lives of 25,647 Ohioans. It is likely that nearly every Ohioan has been touched by cancer in some way, either as a cancer survivor or as part of a support team for a friend or family member.

This comprehensive cancer control plan was developed by the Ohio Partners for Cancer Control (OPCC) with the vision of providing a roadmap to cancer prevention and control for all Ohioans. OPCC is a statewide cancer coalition dedicated to reducing the burden of cancer in Ohio. Membership includes a diverse group of stakeholders such as public health professionals, non-profit organizations, healthcare providers and systems, cancer survivors, cancer advocates, universities and researchers, and community organizations. OPCC is led by an elected executive committee, with support provided by the Ohio Department of Health’s (ODH) Comprehensive Cancer Control Program. ODH’s Comprehensive Cancer Control Program is funded primarily through a grant from the U.S. Centers for Disease Control and Prevention (CDC).

OPCC provides for leadership and coordination to develop and implement Ohio’s cancer plan. The plan is far more comprehensive than what individual partners or even all OPCC members can accomplish, so the plan is truly intended as a roadmap for all who are invested in reducing the burden of cancer in Ohio. Additional partners are encouraged and needed to fully implement this plan and achieve the established objectives by the end of 2030. This is an ambitious plan, but the current burden of cancer in Ohio calls for ambitious goals and collaboration from many partners from across Ohio.
Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. About one in three Americans will be diagnosed with cancer at some point during their lifetime. While anyone can develop cancer, the risk increases with age — 87% of all cancers in the United States are diagnosed in people age 50 and older.\(^1\)

In Ohio, more than 74,000 cancer cases were diagnosed in 2017 and reported to Ohio’s central cancer registry. Of these, 67,268 were new invasive cancer cases. Breast cancer was the leading cause of cancer incidence in Ohio in 2017, followed by lung and bronchus cancer, prostate cancer, and colon and rectum cancer.\(^1\) These data are presented in Table 1. (See Appendix.)

Cancer claimed the lives of 25,647 Ohioans in 2017, at a rate (171.1 per 100,000) that was 12% higher than the U.S. rate (152.5 per 100,000). Lung and bronchus cancer was the leading cause of cancer death in Ohio and the United States in 2017, followed by colon and rectum cancer, pancreatic cancer, and breast cancer. In 2017, males in Ohio were more likely to die of cancer than females, and Black people were more likely to die of cancer than white people and Asians/Pacific Islanders.\(^1\) These data are presented in Table 2. (See Appendix.)

Relative survival is the proportion of people who are alive for a designated time (usually five years) after a cancer diagnosis divided by the proportion of people of similar demographics (e.g., age, race) expected to be alive in the absence of cancer based on normal life expectancy. In Ohio, the five-year relative survival for all cancers combined in 2009-2015 was 66%, compared with 67% in the United States.\(^2\)

Survival varies greatly by cancer type and stage at diagnosis. For example, 26% of Ohio’s lung and bronchus cancers were diagnosed when the tumor was located in the organ where it started (referred to as local stage), where the five-year relative survival is 56%. However, about 44% of lung and bronchus cancer cases in Ohio were diagnosed when the cancer has spread to distant organs (distant stage), where the five-year relative survival is only 5%.\(^1\) On a more positive note, most prostate cancers in Ohio in 2017 were diagnosed at a local (66%) or regional (15%) stage, for which the five-year relative survival is 100%.\(^2\) These data indicate that Ohio needs to continue to increase awareness of the advantages of screening and early detection to reduce cancer mortality.

Significant disparities exist in cancer incidence rates by race/ethnicity. Table 3 in the Appendix indicates that in 2017, Black people had higher incidence rates than white people in Ohio for the following cancers: kidney and renal pelvis, larynx, liver and intrahepatic bile duct, lung and bronchus, multiple myeloma, pancreas, prostate, and stomach.\(^1\) In 2017, rates among white people in Ohio were nearly two times higher than rates among Black people for bladder cancer and brain and other central nervous system cancer, 41 times higher for melanoma of the skin, and five times higher for testicular cancer.\(^2\)
Cancer Burden in Ohio continued

Table 4 in the Appendix presents the number of cancer deaths and age-adjusted mortality rates for selected cancers by race in Ohio in 2017. The overall cancer mortality rate for Black people (194.4 per 100,000) was 15% higher than the rate for white people (169.7 per 100,000) in Ohio in 2017.\(^1\) Black people had higher mortality rates than white people for 10 out of 23 primary cancers in 2017, including liver and intrahepatic bile duct cancer (1.7 times higher), multiple myeloma (2.0 times higher), prostate cancer (2.1 times higher), and stomach cancer (1.9 times higher). Asians/Pacific Islanders had the lowest mortality rate (85.3 per 100,000) for all cancers combined, compared with both white people and Black people, in 2017.\(^1\)

In addition, cancer rates varied geographically in Ohio, with higher overall cancer incidence rates observed in Ohio’s southern and southeastern counties. There are many possible explanations for disparities in cancer rates, including differences in lifestyles/behaviors (e.g., smoking, obesity, alcohol consumption), poverty, education, access to cancer screening and medical care, stage at diagnosis, environmental exposures, and many other factors. Elevated rates in some areas may also be due to chance, particularly for relatively rare cancers and in areas with small populations. These data indicate that Ohio must continue to work to address these issues to reduce health disparities and achieve health equity.

The federal Healthy People 2030 initiative has defined five key areas of social determinants: economic stability, education access and quality, healthcare access and quality, neighborhood and built environment, and social and community context. Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Addressing the social determinants of health is a primary approach to reducing health disparities and achieving health equity, through which everyone has the opportunity to attain their full health potential and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances.

OPCC is dedicated to identifying and addressing health inequities across Ohio. This plan was prepared with an over-arching focus on eliminating health disparities in the areas of primary prevention, screening and early detection, high quality treatment, and end-of-life issues.


\(^2\) Cancer in Ohio 2020. Ohio Cancer Incidence Surveillance System, Ohio Department of Health and The Ohio State University, Columbus, Ohio, April 2020.
The Cancer Burden in Ohio (2017)

New Cancer Cases
More than 74,000 people DIAGNOSED WITH CANCER.
Of these, more than 67,000 were new invasive cancer cases.
Breast cancer was the leading cause of cancer incidence, followed by lung and bronchus cancer.

Cancer Deaths
Cancer is the 2nd most common cause of death, accounting for nearly one of every four deaths.
More than 25,600 DIED OF CANCER.
Lung and bronchus cancer was the leading cause of cancer death in both men and women.

Males had a 14% higher cancer incidence rate than females.
Black people had a 15% higher cancer mortality rate than white people.

Cancer by County
Ohio’s southern and southeastern counties had higher age-adjusted incidence rates for all cancers combined.

Risk Factors

A cancer risk factor is anything that increases a person’s risk of developing cancer. Cancer risk factors include age, sex, race, ethnicity, genetics (e.g., genetic mutations, family history), health behaviors and lifestyle factors (e.g., tobacco and alcohol use, obesity), socioeconomic status, and environmental factors (e.g., radiation, infectious agents, workplace exposures).

Age
56% of all cancer cases were diagnosed in people age 65 and older in 2017.

Poverty
An estimated 1,538,000 Ohioans — 14.0% of the population — were poor in 2017, compared with 13.4% of the U.S. population.

Smoking
20.5% of Ohio adults were current cigarette smokers in 2018, compared with 16.1% in the United States.

Physical Inactivity
1 out of 4 Ohio adults reported no physical activity in the past month in 2018.

Alcohol Use
In Ohio, 21.9% of men and 12.4% of women were excessive drinkers in 2018.

Obesity
34% of Ohio men and women were obese in 2018.

Electra Paskett, Ph.D.

Dublin, 64
Cancer researcher, professor of medicine and public health, and associate director for population sciences and community outreach, The Ohio State University; three-time breast cancer survivor. Father and mother died from cancer. Pictured here in Columbus, 2020.

“I am a three-time breast cancer survivor with my first cancer diagnosed when I was 40 in 1997 and my last one diagnosed 10 years ago in 2010. Both my parents were diagnosed with cancer – my father died from metastatic colon cancer and my mother had four cancers, with pancreatic being the one that killed her. These experiences have shaped my work. …

“My work focuses on developing and testing interventions, especially in minority and underserved populations, so that others do not have to be diagnosed or die from cancer – this is my passion – to beat cancer.

“The Ohio Cancer Plan highlights what we know about how to beat cancer, and strategies to do just that in Ohio populations. We utilize the plan in our work with communities and it also helps us focus on where we need to direct our work to be of most benefit to the state of Ohio and beat cancer!”

All Ohioans can get involved in preventing and controlling cancer in Ohio. Refer to the Call to Action on page 49 for examples of ways in which Ohioans can take action.
**Development of Cancer Plan**

The 2021-2030 Cancer Plan was developed with input from more than 150 individuals representing more than 50 organizations. (See List of Ohio Partners on pages 60-61.) Facilitated by Professional Data Analysts and the Ohio Partners for Cancer Control (OPCC), the work to create the plan took place over the course of 2020. Despite the challenges posed by the global pandemic and the inability to meet in person, 17 topical workgroups worked effectively to propose objectives and strategies for the plan. Members of the OPCC Health Equity and Data Committees provided support to these workgroups. Workgroups were united in their mission to produce a plan with the goal of reducing the burden of cancer in Ohio. The following principles, established at the outset, guided this process:

1) Use transparent processes. 
2) Attend to health equity. 
3) Include perspectives of diverse stakeholders. 
4) Align with existing statewide and federal efforts. 
5) Be data driven. 
6) Include measurable goals. 
7) Be evidence-based. 
8) Be easy to use and aesthetically pleasing.

Beginning in 2021, the topical workgroups established to develop objectives and strategies shifted their focus to implementing the plan’s strategies. Progress will be monitored on an annual basis and reported via a dashboard on the OPCC website. While the plan will be reviewed at the five-year mark, revisions to the plan can occur as needed.

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**Angie Crawford**

*Columbus, 1973-2021*

*Died at age 47 after six-year battle with cancer.*

*Neuroendocrine cancer of the left lung,*

*metastatic neuroendocrine cancer of the ovary.*

*Partial lung removal, chemotherapy.*

*Pictured here in November 2020 with husband Nathan and children Joshua and Chloe.*

“Looking my children in the eyes at the ages of 10 and 6 and telling them ‘Mommy has cancer’ was one of the hardest things I’ve ever done. ... Telling my children again that the cancer has returned was even more difficult, because now they were older and understood that ‘cancer meant death.’ It was devastating. I told them I am going to fight this with everything in me and we were going to pray and get through this together.”

*Angie will be remembered for her smile, kindness, and optimism by many family members and friends who miss her.*
Health Equity and Cancer

Transitioning from Health Disparities to a Health Equity Mindset

Health equity has many definitions, but the consistent theme is that everyone in society will have a fair and just opportunity to achieve and sustain optimal health.

Approaching cancer care from a health equity lens provides an opportunity to tackle root causes that ultimately lead to disparities. This approach also provides the opportunity to take the bold step of articulating a practical vision of what health equity can look like at an institutional level. All too often efforts to improve health outcomes focus on reducing or eliminating disparities as the primary focus. Yet, disparities only indicate there is an issue, and they alone do not communicate or properly contextualize the causes of disparate outcomes. Because of this, a disparity focus can unfortunately create an atmosphere of unclear goals, further delaying sufficient health improvement in various groups. For example, there have been instances in which goals to reduce disparities have been met, but this was an unintended outcome of the dominant group demonstrating worse health outcomes rather than disparate groups making significant health improvements.

Historically, work in this area has focused on eliminating disparities as an overarching goal. While efforts aimed at eliminating disparities are certainly important, they do not necessarily include strategies to address their root causes, which are often systemic in nature. Through identifying the social determinants of health and making interventions accordingly, it is imperative to shift from centering on the disparities themselves to centering on the root causes of disparities, in order to achieve health equity. This will create lasting systemic change.
Committed to Equity

One of the Ohio Partners for Cancer Control (OPCC) coalition’s guiding principles when developing its 2021-2030 Cancer Plan was a commitment to making health equity a central focus. This required an understanding of what health equity is and is not and deciding how to incorporate health equity at each phase of the planning and development processes.

Contributors were advised to assess how health equity processes could exist in all aspects of the plan (stakeholder selection, creation of objectives and strategies, implementation, etc.) rather than just localizing them. To facilitate this process, contributors used a number of tools. For instance, the OPCC developed a Health Equity Checklist to guide workgroups. Some workgroups used additional equity frameworks and toolkits to assist their planning, such as convergence analysis, the Health Opportunity Index, and targeted universalism. In addition, workgroups were required to develop at least one strategy per objective that promotes health equity.

Convergence analysis is used to identify where chronic illness, including cancer, exists at the highest rates paired with the poorest outcomes. This is important because knowing what other health issues are impacting communities can help focus resources to achieve optimal health outcomes.

The Health Opportunity Index identifies specific social determinants of health that drive different health disparities out of control. This tool helps to identify issues that must be addressed in areas experiencing a high burden of cancer.

Targeted universalism means setting universal goals and using targeted strategies to support different groups in achieving them. It is an important framework with which to develop strategies that advance health equity.

Darrell M. Gray, II, MD

New Albany, 39
Gastroenterologist, The Ohio State University Wexner Medical Center and The James Cancer Hospital, Columbus. Pictured here, 2019.

“My goal is always to deliver world-class patient and family-centered care with cultural humility and with consideration of social determinants of health that may impact their health and well-being.

“Given the stark disparities in health and healthcare among Black and indigenous people of color (e.g., Black men have higher incidences and mortality rates from many forms of cancer) and the lack of diversity in clinical trials, much of my work is dedicated to developing and promoting strategies to enhance diversity and inclusion in healthcare and research, and advance health equity.”
Empowering Change

One of the major developments since the implementation of the previous cancer plan is the elevation of focus on disparities existing in our health system. The added imperative to address disparities will hopefully compel each stakeholder to enhance capacity to develop strategies toward cancer care that have not previously existed. The intent of this plan is to take a comprehensive approach to generate ideas for how to integrate equity and combat the social determinants of health. This, of course, includes acknowledging disparities in healthcare services and delivery.

Institutionalizing health equity is a goal of both the Ohio Comprehensive Cancer Control Program (CCCP) and the OPCC. It is important to understand that achieving health equity is complex and each stakeholder will differ in capacity to implement strategies to do so. Nonetheless, with a firm commitment to realizing health equity and addressing difficult issues such as racism, it becomes possible to start or improve upon the process of equitable health outcomes. Health equity is more than an outcome; it is a process that requires recognizing and rectifying historical inequities, changing institutional practices, and above all, valuing individuals and all populations equally. In the absence of a commitment to the process of health equity, otherwise achievable goals will continue to seem impossible. Holistic strategies are needed to evolve cancer care. With this in mind, this document should be viewed through a health equity lens.

Cindy (CJ) Gaillard

Columbus
Wife diagnosed with noninvasive breast cancer (ductal carcinoma in situ, or DCIS) in 2016 and underwent bilateral mastectomy.
Pictured here at WOSU Public Media, 2019.

"We were treated with respect as a couple and that was a huge relief for us both. Previously, my wife had years of reproductive health issues that ended up with many surgeries and while most hospital staff and doctors were not abusive toward us, we were met with indifference. ... I didn't want to create more tension by addressing it, so I focused on my wife's recovery and stayed silent. ...

"At the Spielman (the Stefanie Spielman Comprehensive Breast Center in Columbus), the doctors and nurses acknowledged my role in the initial meeting, they made time for my questions and concerns, and they were overall more open to my role and to our relationship. ... Most of us in the LGBTQ+ community walk around feeling invisible in a society that values heteronormative individuals. So simple acknowledgement that she and I were in this together went a long way in decreasing our stress."
"I made the decision to medically transition about 11 years ago. I had my first mammogram about a year earlier, at age 40, as medically advised for cisgender females (whose gender identity corresponds with the sex they had at birth). The process was unnerving for many of the same reasons as it is for cisgender females. However, let's add in the mental and emotional challenges of focusing on an aspect of my body that was already a daily obstacle and dealing with healthcare providers who did not have any skill set in navigating my encounter with medical or emotional awareness. I felt like a whispered conversation behind closed doors. Jump 11 years later and many more encounters with healthcare that made me feel like a ‘lab rat.’ …

"It is now time to start the ‘top surgery’ process, and that meant another mammogram. … The mammogram was completed on a Monday morning, relief that it was over was soon replaced with paralyzing fear. I received a phone call early that Tuesday informing me that I need to be seen ASAP. … I was terrified. I just knew I had cancer and the part of my body that had been mentally and emotionally killing me was going to succeed in physically killing me.

"I walked into a facility where men are not commonly seen for testing with the added fear that I was going to need to “teach” staff about my physiology. Surprise! I was met with kindness, awareness, and acceptance. I completed the testing and anxiously awaited the outcomes. ‘Ty, we were able to compare your mammogram that you had prior to hormone therapy and have determined that the tissue changes that have occurred are due to the breast tissue changes directly related to the hormones.’ Sigh of relief and gratitude!

"I asked the provider the importance in my situation of having had the previous testing and was assured that it made a significant difference. Those providers also ensured me that it would be very important for those on similar journeys to have that reference point for care and treatment. I cannot imagine having gone through that process without the kindness and awareness of the staff. … I received treatment of me — a person — not a “lab rat.”
Evaluation

Evaluation of the Cancer Plan will be interwoven into the implementation of the Plan

The development of the 2021–2030 Ohio Cancer Plan was informed by previous evaluation findings and guided by eight principles. (See Development of Cancer Plan on page 8.) Previous and current evaluation efforts take a utilization-focused approach, identifying the primary users of the evaluation and incorporating those voices into the evaluation process. This was exemplified in the revision process. Explicit criteria that are Specific, Measurable, Achievable, Relevant, and Timely (SMART) were created in partnership with the Core Revision Team for the development of objectives and was included in the Cancer Plan Revision Guidebook. This guidance was used by topical workgroups to develop the objectives and for the review and ultimate approval of each objective. In a parallel manner, guidance was developed and shared with the topical workgroups to align the strategies with the evidence-base for cancer control, ensuring space was also provided for innovative strategies to be implemented.

The 2021–2030 Cancer Plan will be evaluated through comprehensive and coordinated efforts between the Ohio Department of Health, the OPCC Data Committee, and an external evaluator. The evaluation will be guided by the CDC’s six step Framework for Program Evaluation in Public Health, as detailed in the comprehensive evaluation plan, which is under a separate cover. Evaluation processes will be developed to build systems for accountability and to examine how the implementation of strategies contribute to progress on Cancer Plan goals. The evaluation will explore in what ways implementation of the Ohio Cancer Plan attends to the principles of health equity, meaningful involvement of diverse stakeholders, being data-driven, and implementing evidence-based or innovative strategies. The progress on meeting the objectives of the 2021–2030 Cancer Plan will be reviewed annually with OPCC partners in a Cancer Plan dashboard.
Primary Prevention

**GOAL:** Prevent Cancer from Occurring.

**Cancer Genetics**

**OBJECTIVE 1:** By 2030, increase by 20% the yearly overall number of individuals who receive Ohio Cancer Genetic Network Cancer Risk Assessment services (baseline=12,358; target=14,830; midpoint (5-year) yearly target=13,594).

**Strategies**
- Conduct and track education events for providers about referral guidelines for cancer risk assessment (e.g., students, allied health professionals, and physicians).
- Provide access to evidence-based resources regarding hereditary cancer for both the public at large, and healthcare providers.
- Create and foster new partnerships with an array of community organizations to identify the needs of groups experiencing disadvantages, including minorities, low-income communities, and LGBTQ+ communities, in order to improve genetic counseling practices and outreach.
- Update and rerecord the Cancer Genetics in Your Practice presentations on OhioTrain.
- Update the map on the ODH Genetics Services Program website that contains the contact information of all Ohio Cancer Genetics Risk Assessment sites on a quarterly basis.
- Continue collaboration among cancer genetic counselors and hospital registries to identify patients and families appropriate for genetic counseling. Use data to identify approaches to increase referrals to a genetics risk center.
- Collect and evaluate genetic counseling service models utilized (including traditional in-person visits and telehealth visits) for new unique patient consults to improve access to service across the state.
- Establish baseline data across Ohio pediatric cancer genetics sites regarding genetic counseling referrals for pediatric cancer, with an emphasis on referrals for specific pediatric cancers that have a greater than 10% chance of carrying a germline mutation.
Exposure to Environmental Carcinogens

OBJECTIVE 2: By 2030, increase the number of new radon mitigation systems installed in Ohio homes from 67,668 to 167,668 (baseline: ODH RADMAT, Licensed Radon Contractors quarterly reports).

Strategies

• Increase public awareness of the connection between radon and cancer risk.
• Encourage home buyers and sellers to hire Ohio licensed radon professionals.
• Educate realtors, building code officials, medical professionals and housing authorities about radon, the risk of lung cancer, and their role in reducing lung cancer.
• Support legislation for building codes that include Appendix F of the International Building Code.
• Reduce out-of-pocket costs associated with radon testing and mitigation.

Melissa

Columbus, 50
Triple negative breast cancer.
Pictured here at a belly dance class at a cancer support community in Columbus, 2019.

“’It’s probably nothing, but let’s be sure.’

“Looking back on that statement, I am very grateful my gynecologist was being cautious, despite the fact that I was only 35 years old. I had a clear baseline mammogram at 35, and three months later, I found a lump. ... I chose to have the recommended surgeries and treatment, and I am thankful I had good insurance to help with the cost of care. Addressing the emotional toll of cancer, I became involved in a number of community groups, offering and receiving support. Having a Statewide Cancer Plan will be an important guiding tool to support survivors, caregivers, and healthcare providers as they navigate their cancer journeys together.”
Liver Cancer

**OBJECTIVE 3:** Reduce the incidence rate of liver cancer from 7.2 to 6.5 per 100,000 people by 2025 and to 5.76 per 100,000 people by 2030 (baseline: 2017 Ohio Cancer Incidence Surveillance System, OCISS).

**Strategies**

- Promote the use of electronic screening and brief intervention (e-SBI) to facilitate understanding and self-assessment about the risks and consequences of excessive drinking.
- Increase notification and education targeting patients admitted to a hospital-based system with an increased risk of alcohol withdrawal requiring CIWA (Clinical Institute Alcohol Withdrawal Assessment for Alcohol Scoring Guidelines) utilization to intervene and reduce alcohol dependence.
- Reduce alcohol-related cirrhosis by influencing policy change to increase alcohol taxes, decrease access by limiting days and hours of alcohol sales, enforce the prohibition of sales to minors, and limit the number of alcohol retailers in a given area.
- Encourage active lifestyle change with the goal of weight reduction and management to reduce the incidence and complications of NASH (nonalcoholic steatohepatitis, a form of liver damage) resulting in cirrhosis and/or hepatocellular carcinoma, a type of primary liver cancer.
- Increase access and educational awareness of hepatitis B vaccination, including the benefits of vaccination.
- Increase affordable access to treatment in populations unable to obtain medication for hepatitis C and hepatocellular cancer.

**OBJECTIVE 4:** Reduce the percentage of Ohioans diagnosed with late stage liver cancer from 40.3% to 36.8% in 2025 and 33.3% in 2030 (baseline: 2017 OCISS).

**Strategies**

- Educate providers and patients to increase usage of recommended screening tests (i.e., ultrasound and alpha-fetoprotein) for patients who are at increased risk for hepatocellular cancer from underlying cirrhosis, specifically in the Black population, who have the highest rate of liver cancer incidence and mortality.
- Incorporate provider reminders within an EMR (electronic medical record) for eligible patients to promote appropriate recommended screening.
OBJECTIVE 5: Increase the percentage of adults screened for hepatitis C from 0.87% to 20% in 2025 and 40% in 2030 (baseline: 2019 electronic health record data from OhioHealth and Promedica).

Strategies

• Recruit additional hospital systems, healthcare providers, insurers, and third-party payers to promote and educate about hepatitis C screening per national guidelines.

• Educate groups experiencing disproportionate effects and healthcare providers about the impact of hepatitis C, including transmission, complications, and curative treatment.

• Obtain data regarding population screening results for hepatitis C from additional health systems, providers, and third-party payers, including Medicaid.

Shilpa A. Padia, MD

Columbus, 37
Breast surgical oncologist.
Lost father to liver cancer in 2001.
Pictured at Cleveland Clinic, 2013.

“I looked forward to attending college since I could remember. When those days came, my father and I traveled together to find my best fit. On one visit, he didn’t feel well. ... Two months later he was diagnosed with stage IV liver cancer; he passed away four months after he was diagnosed. Before he passed, he made me promise that if I became a physician, I would treat people with cancer because I knew what it was like to be on the other side. Fast forward to today – I am a breast surgical oncologist and spend every day with men and women diagnosed with breast cancer. I know my father is smiling down and always with me. ...”

“The Cancer Plan matters to me because it shows that, as a state, we are invested in the outcomes of the men and women who are diagnosed with cancer every year. ...”

“I plan to use the Cancer Plan as a reference guide and compilation of resources for my community. Since it is a state-specific plan, it will be a great tool to share with patients and their families.”
Physical Activity

**OBJECTIVE 6:** By 2030, increase the percentage of children, 6 to 11 years of age, who are physically active at least 60 minutes per day from 29% to 35% (baseline: 2016-2017 National Survey of Children’s Health).

**Strategies**
- School-based programs to increase physical activity (e.g., active recess, physically active classrooms, physical education enhancements).
- Implement Safe Routes to School programs.
- Change the built environment to encourage physical activity (e.g., green spaces and parks, bike and pedestrian master plans, Complete Streets, zoning regulations, mixed-use development).
- Exercise prescriptions from healthcare providers.

**OBJECTIVE 7:** By 2030, decrease the percentage of adults, age 18 and older, reporting no leisure time physical activity from 25.4% to 22% (baseline: 2018 BRFSS).

**Strategies**
- Change the built environment to encourage physical activity (e.g., green spaces and parks, bike and pedestrian master plans, Complete Streets, zoning regulations, mixed-use development).
- Exercise prescriptions from healthcare providers.
- Implement workplace physical activity programs and policies (e.g., worksite obesity prevention interventions, active commuting, incentives for using public transportation).

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**Wendi Waugh**

*Portsmouth, 53*

15-year cancer survivor.  
*Administrative director of cancer services, administrative director of community health and wellness, Southern Ohio Medical Center.*

*Breast cancer, diagnosed in 2006 at age 39, multiple surgeries, chemotherapy, hormone therapy, genetic counseling and testing, radiation therapy, reconstruction, rehabilitation.*

*Pictured here in Southern Ohio Medical Center LIFE Center, 2020.*

“I have been transformed: from victim to survivor; passionate to relentless; educated to experienced. ...”

“During the rehabilitation phase of my journey, I developed a passion for survivorship programming and recognized the importance of living life with and after cancer. The new Wendi is an avid hiker and cyclist, an AFAA (Athletics and Fitness Association of America) Certified Group Fitness Instructor, and leads a local non-profit organization dedicated to inspiring activities of play, exercise, and social connections to promote health and wellness. I credit my treatment team with igniting fitness and wellness during my journey and have since been instrumental in creating the foundation for Survivorship Care Plans and Programming at Southern Ohio Medical Center.”
Nutrition

**OBJECTIVE 8:** By 2030, decrease the percentage of high school students who did not eat fruit or drink 100% fruit juices during the past 7 days from 10.6% to 9.6% (baseline: 2019 YRBS).

**OBJECTIVE 9:** By 2030, decrease the percentage of high school students who did not eat vegetables (excluding french fries, fried potatoes, or potato chips) during the past 7 days from 8.7% to 7.7% (baseline: 2019 YRBS).

**Strategies**
- Increase fruit and vegetable access and education (e.g., community gardens, school gardens, farm to institution programs, taste testing events).
- Implement fruit and vegetable incentive programs (e.g., Produce Perks).
- Increase healthy food retailers (e.g., farmers’ markets, healthy corner stores, incentives to bring retailers to under-served communities).
- Encourage adherence to food and beverage guidelines (e.g., healthy vending, healthy food offerings in cafes and cafeterias).
- Establish produce prescription programs with healthcare providers.
Obesity

OBJECTIVE 10: By 2030, increase the percentage of Ohio adults with a healthy weight (BMI 18.5-24.9) from 30% to 32% (baseline: 2018 BRFSS).

Strategies
• Provide evidence-based worksite programs for weight loss.
• Promote awareness about the connection between cancer risk and prevention, and nutrition, physical activity, and obesity for all ages.
• Support third-party reimbursement for primary care treatment of individuals who are diagnosed overweight or obese by medical providers, registered dietitians, and other qualified healthcare professionals.
• Develop and disseminate guidelines for the use of evidence-based strategies to prevent and manage obesity in primary care.
• Encourage the consumption of water as the beverage of choice.

OBJECTIVE 11: By 2030, increase the percentage of Ohio high school students (grades 9 to 12) with a healthy weight (BMI 18.5-24.9) from 59.8% to 61.8% (baseline: 2019 YRBS).

Strategies
• Implement digital health interventions for adolescents who are overweight or obese.
• Implement nutrition and physical activity interventions in preschool and childcare.
• Promote awareness of the connection between cancer risk and prevention, and nutrition, physical activity, and obesity for all ages.
• Develop and disseminate guidelines for the use of evidence-based strategies to prevent and manage obesity in primary care.
• Support third-party reimbursement for primary care treatment of individuals who are diagnosed overweight or obese by medical providers, registered dietitians, and other qualified healthcare professionals.
• Encourage the consumption of water as the beverage of choice.
Skin Cancer and Ultraviolet (UV) Exposure

**OBJECTIVE 12:** Improve reporting of melanoma cases from 3,343 cases to 3,510 cases by 2026 and 3,677 cases by 2030 (baseline: 2017 OCISS).

**Strategies**
- The Ohio Cancer Incidence Surveillance System (OCISS) will help dermatology offices overcome barriers for reporting (e.g., develop process for entering faxed reports, simplify reporting, provide training, utilize volunteers).
- Disseminate information about reporting to potential dermatology reporters through the Ohio Dermatological Association.
- Identify and work with dermatopathology labs to increase reporting (e.g., through Clinical Laboratory Improvement Amendments).

**OBJECTIVE 13:** By 2030, increase education of Ohio youth about skin cancer prevention (and/or reducing UV exposure) through partnerships with three organizations that serve youth.

**Strategies**
- Contact youth organizations (e.g., school districts, 4-H, scouts) to urge development of UV safety policies (e.g., sunscreen, hats, sun-protective clothing).
- Produce and diseminate videos about sun/UV avoidance.
- Provide education about melanoma in individuals with darker skin tones.

**OBJECTIVE 14:** By 2030, restrict the use of tanning devices for those under the age of 18, with no exemptions, by supporting statewide and/or federal legislation as measured by passage of a law that meets model language.

**Strategies**
- Support Ohio legislation that does not allow for parental permission for use of tanning devices.
- Work with advocacy groups to gain support for proposed legislation.
- Use digital media (e.g., social media) to encourage Ohioans to contact their legislators (i.e., calls to action).
Michael Sarap, MD

Cambridge, 65
General surgeon, 33 years, Southeastern Med in Cambridge; cancer liaison physician and co-chair, American College of Surgeons Commission on Cancer program in Ohio; co-founder, Tina Kiser Cancer Concern Coalition; board member, Hospice of Guernsey Inc.
Lost father and four uncles to lung cancer.
Mother survived breast cancer.
Pictured here with grandson Brendan and son-in-law Joseph at Seneca Lake, Ohio, July 2020.

“I have been intimately involved in the cancer diagnosis and work-up of my parents, uncles, aunts, and cousins. Playing the role of both family member and physician can be very painful, exhausting and draining and yet, playing even a small role in helping my family members navigate their cancer journey has been rewarding and life changing. I have helped some of them celebrate favorable pathology reports and curative procedures and had ‘the talk’ with others about the decision to withdraw treatment and enter hospice care. I have been at the bedside as way too many family members have drawn their last breath as a result of cancer. ...

“The State Cancer Plan … has a huge impact on where efforts are concentrated for the most good. Our local cancer program and our local cancer coalition look to the state plan for ideas for improvement projects and community initiatives. ...

“Over three decades, I have had the honor and privilege of caring for thousands of patients with skin, colon, breast, lung, and a multitude of other cancers. A special relationship or bond develops between most cancer patients and their surgeons. ... Cancer patients want, and need, a physician and advocate that will treat them like they would treat their own family member. ... I have always felt a duty to be present to support the dying patient and their family and even to be at the bedside at their passing if possible.”
Tobacco Use

OBJECTIVE 15: By 2030, decrease the percentage of Ohio adults age 18 years of age or older who report any current tobacco/nicotine use from 27.6% to 22.1%. (baseline: 2018 BRFSS).

Table 1. Adult Tobacco Use by Product Type (2018 BRFSS)

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Percent Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any tobacco/nicotine</td>
<td>27.6</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>20.5</td>
</tr>
<tr>
<td>Flavored tobacco</td>
<td>12.3</td>
</tr>
<tr>
<td>RYO tobacco</td>
<td>9.1</td>
</tr>
<tr>
<td>E-cigarettes</td>
<td>5.4</td>
</tr>
<tr>
<td>Smokeless tobacco</td>
<td>4.3</td>
</tr>
<tr>
<td>Cigars</td>
<td>2.8</td>
</tr>
<tr>
<td>Little cigars/cigarillos</td>
<td>2.5</td>
</tr>
<tr>
<td>Waterpipe/hookah</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Strategies

- Identify and promote guidance on quality improvement (QI) initiatives to change systems to routinely screen for tobacco use, refer to cessation treatment, and follow up on referrals to cessation.

- Increase opportunities for financial and technical support for health systems to implement QI initiatives to systematize screening, referral, and follow-up.

- Enact policies that establish a uniform benefit for cessation across payers (e.g., Medicaid, Medicare, and private insurers that provide insurance in Ohio) at no cost to participant.

- Conduct mass media campaigns that drive tobacco users to the Ohio Tobacco Quit Line, which is available to all.

- Conduct media and communication campaigns that direct tobacco users to community-based resources.

- Conduct communication activities directed toward healthcare professionals regarding availability of QI resources and promoting screening and referral of tobacco users to cessation resources.

- Expand tobacco and smoke-free environments in the state.

- Improve systems to gather data to better define health inequities related to tobacco.
OBJECTIVE 16: By 2030, decrease the percentage of Ohio middle and high school youth who use tobacco/nicotine by 20% from baseline (baseline: 2019 YRBS).

Table 2. Youth Tobacco Use by Product Type – Percent Prevalence (2019 YRBS/YTS)

<table>
<thead>
<tr>
<th>Product Type</th>
<th>High School</th>
<th>Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any tobacco/nicotine</td>
<td>35.5</td>
<td>16.5</td>
</tr>
<tr>
<td>E-cigarettes</td>
<td>29.0</td>
<td>11.9</td>
</tr>
<tr>
<td>Flavored tobacco</td>
<td>13.6</td>
<td>6.4</td>
</tr>
<tr>
<td>Smokeless tobacco</td>
<td>9.9</td>
<td>4.1</td>
</tr>
<tr>
<td>Cigars and cigarillos</td>
<td>7.2</td>
<td>4.8</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>4.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Waterpipe/hookah</td>
<td>3.0</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Strategies

- Enact an excise tax at point of sale for e-cigarette and vaping products to an amount that will deter youth use and allow for effective enforcement of sales-to-minors laws, including retailers that sell only e-cigarette and vaping tobacco products. Ensure excise tax for these and other tobacco products are at equity to cigarette excise tax.

- Assure statutory definitions of tobacco include e-cigarette and vaping products and language to cover all commercial nicotine and emerging products so that these can be regulated to restrict youth access and prevent youth initiation.

- Enact state and/or local retailer licensing policies that align with model policies to provide options for reducing the density of retail tobacco establishments and that limit proximity of retail establishments to areas frequented by youth, including, but not limited to, schools, campuses, and parks.

- Promote adoption of smoke-free and tobacco-free policies aimed at changing norms of tobacco use and protecting youth from exposure to second-hand smoke (e.g., multi-unit housing and vehicles).

- Enact state and local restrictions on all flavored tobacco products, including e-liquids. Flavor restrictions should include menthol flavor.

- Conduct coordinated state and local mass media campaigns that use multiple media formats and include hard-hitting graphic images. Campaigns should focus on changing knowledge, beliefs, attitudes, and behaviors affecting tobacco use (including e-cigarette and vaping product use) and provide youth with information and resources on how to quit.
OBJECTIVE 17: By 2030, expand Ohio’s Comprehensive Smoke-Free Law to include all grounds owned by the State of Ohio.

Strategies
- Facilitate education and promotion of the impact of tobacco-free grounds on changing social norms on tobacco use and, therefore, initiation and use of tobacco.
- Promote grassroots support of tobacco-free state property.
- Develop nontraditional partnerships (e.g., environmental and natural resources) to promote improved environmental and human health impacts.
- Collaborate to produce a document in support of smoke-free state properties that can be used to promote the initiative to decision makers.
- Engage youth and youth advocacy resources to promote these efforts and like efforts in their own communities to build statewide support.
- Develop and conduct mass media and other communication strategies to increase knowledge and awareness of the impact of these actions and to promote actions to maximize opportunities for policy adoption.

OBJECTIVE 18: By 2030, increase the cigarette excise tax and tax on e-cigarette vaping taxes, improving Ohio’s ranking from 27th to at least 15th (baseline: The Tax Burden on Tobacco).

Strategies
- Coordinate efforts to promote increased knowledge among partners and stakeholders on the impact of cigarette taxes on tobacco use.
- Promote actions to support a cigarette excise tax increase and to tie the percentage of tax revenue to funding for comprehensive tobacco prevention and control.
- Adopt a cigarette excise tax increase as part of organizational legislative agendas.
- Include the promotion of a statewide cigarette excise tax in local community action plans as a strategy to impact tobacco use.
OBJECTIVE 19: By 2030, decrease existing smoking disparities in Ohio adult populations by 20% from baseline.

Table 3. Percent Prevalence Gap – Tobacco Use Disparities (2018 BRFSS)

<table>
<thead>
<tr>
<th>Adult Population</th>
<th>Percent Prevalence Gap*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not graduate from HS/HS graduate or higher</td>
<td>21.5</td>
</tr>
<tr>
<td>Frequent poor mental health days/Infrequent poor mental health days</td>
<td>20.1</td>
</tr>
<tr>
<td>Income &lt; $15,000/Income GTE $15,000</td>
<td>19.5</td>
</tr>
<tr>
<td>Persons living with disability/Persons not living with a disability</td>
<td>12.4</td>
</tr>
<tr>
<td>LGBT/Non-LGBT</td>
<td>8.2</td>
</tr>
</tbody>
</table>

*Percentage gap in smoking rate between the two populations listed.

Strategies
- Implement existing evidence-based or promising practice strategies to address tobacco burden inequities (e.g., increase cigarette excise tax, tobacco retail licensing to reduce retail tobacco store densities in poor or minority neighborhoods, policies that provide for equal access to no-cost treatment for tobacco cessation).
- Promote statewide opportunities for learning about health inequity and disparities that exist in terms of tobacco burden.
- Conduct research to contribute to evidence base about how to improve health equity and impact disparate burden of tobacco use.
- Promote community-based tobacco health equity work through increased funding opportunities and technical support for community engagement projects.
- Prioritize health systems change work (e.g., improvements in screening for tobacco use and referral to treatment for cessation) to health systems and practices that serve high percentages of individuals who are disproportionately impacted by tobacco use.
- Prioritize promotion of tobacco screening and available cessation resources to clinical healthcare practitioners serving populations at higher risk.
- Prioritize smoke-free and tobacco-free policy adoption efforts in communities and organizations or businesses with highest populations of individuals placed at higher risk.
Vaccines for Cancer Prevention/HPV-Associated Cancers

**OBJECTIVE 20:** Increase the percentage of adolescents 13 to 17 years of age who are up-to-date with human papillomavirus (HPV) vaccine, especially among groups experiencing disproportionate effects residing in non-metropolitan (rural) areas of the state, from 58.2% to 70% in 2025 and 80% in 2030 (baseline: 2018 National Immunization Survey - Teen Survey).

<table>
<thead>
<tr>
<th></th>
<th>Baseline (2018)</th>
<th>Target (2025)</th>
<th>Target (2030)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Immunization Survey Females</td>
<td>59.1%</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>National Immunization Survey Males</td>
<td>57.3%</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>National Immunization Survey All</td>
<td>58.2%</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>National Immunization Survey Non-metro</td>
<td>42.3%</td>
<td>60%</td>
<td>80%</td>
</tr>
</tbody>
</table>

**Strategies**

- Educate students and adolescents about the HPV vaccine (*e.g.*, *HPV Vaccination Education Comic Book, Someone You Love: The HPV Epidemic*).
- Educate parents and guardians on HPV-associated cancers and the importance of HPV vaccination (*e.g.*, *HPV Vaccination Education Comic Book, Someone You Love: The HPV Epidemic*).
- Educate health and dental providers about current Advisory Committee on Immunization Practices (ACIP) recommendations regarding HPV vaccination to improve health and dental professional knowledge, practice behaviors, and system support.
- Encourage postsecondary education in healthcare (*e.g.*, medical, nursing, dental and dental hygiene) to include HPV vaccination information for students in curriculum (*e.g.*, Cancer Prevention through HPV Vaccination–Action Guides).
- Promote statewide public awareness campaigns that encourage HPV vaccination and cancer prevention.
- Partner with local organizations to increase outreach and education efforts targeting community awareness of the benefits of HPV vaccination.
- Facilitate enrollment and participation in the state’s Vaccine for Children (VFC) program for providers who serve adolescent population and would like to participate.
- Implement health systems changes, including client reminder and recall systems, provider reminders, and provider assessment and feedback.
OBJECTIVE 21: Increase the percentage of young adults 18 to 26 years of age who are up-to-date with HPV vaccine from 25.1% to 50% in 2025 and 80% in 2030 (baseline: 2018 National Center for Health Statistics).

<table>
<thead>
<tr>
<th>National Center for Health Statistics Females</th>
<th>Baseline (US)</th>
<th>Target (2025)</th>
<th>Target (2030)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Center for Health Statistics Males</td>
<td>9.0%</td>
<td>40%</td>
<td>80%</td>
</tr>
<tr>
<td>National Center for Health Statistics All</td>
<td>21.5%</td>
<td>50%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Strategies

- Educate young adults in postsecondary education programs (e.g., trade and vocational schools, universities, colleges) to increase knowledge on HPV and HPV vaccination utilizing the HPV Vaccination Education Comic Book, Someone You Love: The HPV Epidemic, and Indiana University’s HPV-Free Collegiate Vaccination Toolkit.

- Educate young adults in worksites to increase knowledge on HPV and HPV vaccination utilizing the HPV Vaccination Education Comic Book, Someone You Love: The HPV Epidemic and Indiana University’s HPV-Free Collegiate Vaccination Toolkit.

- Partner with local organizations to increase outreach and education efforts targeting community awareness in groups who are disproportionately affected (residing in non-metropolitan and rural areas of the state) about the benefits of HPV vaccination.

- Educate providers about current ACIP recommendations regarding HPV vaccination to improve health and dental professional knowledge and practice behaviors, and system support.

- Encourage postsecondary education programs to require HPV vaccinations for new students.
OBJECTIVE 22: By 2030, decrease the HPV-associated cancer incidence rate in Appalachian Ohio (14.3 per 100,000) to the rate in non-Appalachian Ohio (12.4 per 100,000) to eliminate the disparity between Appalachian and non-Appalachian Ohio (baseline: 2017 OCISS).

<table>
<thead>
<tr>
<th>Ohio Cancer Incidence Surveillance System</th>
<th>Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio Cancer Incidence Surveillance System Ohio</td>
<td>12.7 per 100,000</td>
</tr>
<tr>
<td>Ohio Cancer Incidence Surveillance System Appalachian</td>
<td>14.3 per 100,000</td>
</tr>
<tr>
<td>Ohio Cancer Incidence Surveillance System Non-Appalachian</td>
<td>12.4 per 100,000</td>
</tr>
</tbody>
</table>

**Strategies**

- Focus HPV vaccine promotion in Appalachian Ohio, where HPV-associated cancer rates are higher than the rest of the state, with tailored messaging to encourage completion of the HPV vaccine series.
- Educate parents/guardians and the public in lunch-and-learn webinars on the six types of cancer associated with HPV and raise awareness about HPV vaccine and cancer prevention for girls and boys.
- Distribute an HPV snapshot on data and vaccination rates with call-to-action steps local community agencies can take to make a difference.

**Diane Crawford**

**Westerville, 54**

*Founder and Executive Director, The Crawford Crew Foundation; advocate, National Institutes of Health Gynecologic Cancers Steering Committee and Cervical Cancer Task Force; Executive Committee Member, Ohio Partners for Cancer Control.*

*Stage 1b cervical cancer, diagnosed 2009, radical hysterectomy.*

*Pictured here in 2020 at The Crawford Crew Foundation’s Raise A Racket to End HPV-Related Cancers fundraiser.*

“I founded The Crawford Crew (TCC), a grassroots, 100% volunteer nonprofit organization in November 2009, just months after my diagnosis, with the mission of ending cancers related to human papillomavirus (HPV) through education and fundraising to support families, treatment, and research.

“My ‘I’ve never met a stranger’ philosophy is what has opened many doors for TCC and enabled the organization to educate and support thousands of people. Having worked in corporate America for more than 20 years, my passion, and my new normal, is being a wife, mother of three, educator and advocate, and cancer survivor.”
Early Detection

**GOAL:** Detect Cancer at its Earliest Stage.

**Breast Cancer**

**OBJECTIVE 1:** By 2030, increase the percentage of women 50 to 74 years of age who have been screened for breast cancer in accordance with United States Preventive Services Task Force recommendations from 77.7% to 95% (baseline: 2018 BRFSS).

**Strategies**

- Develop and disseminate tailored toolkits for partner organizations and businesses in the community (e.g., faith-based, salons, libraries) to educate women and to promote breast cancer screenings among various audiences, including groups who are disproportionately affected.

- Develop and disseminate small (e.g., videos and printed materials) and social media that educate people and dispel myths about breast cancer screening and prevention in a variety of languages and featuring members of specific groups (e.g., Somali testimonials).

- Educate the Ohio General Assembly about the Breast and Cervical Cancer Project (BCCP) to ensure funding in the state budget for the program is sufficient to meet the need and stated objective.

- Actively partner with Ohio Medicaid managed care plans to improve breast cancer screening rates (e.g., quality improvement, education, access incentives).

- Establish best practices for mammograms at recommended intervals, such as mammography and appointment reminders in key languages, tiered interventions (personal calls vs. only letters, physician-signed letters, text messages), and encouraging scheduling when patients are in clinics.

- Develop and implement a quality improvement process for healthcare providers that incorporates evaluation of cancer screening practices and feedback to improve screening rates.

- Educate providers and human services agencies about BCCP to improve referral and utilization of the program.

- Work with community partners to provide group education sessions with the goal of informing, encouraging, and motivating participants to seek recommended screening.

- Conduct group or one-on-one education in conjunction with mobile mammography screenings in underserved communities (e.g., Appalachia) and at health fairs (e.g., Asian Festival) using the aforementioned education toolkit.
OBJECTIVE 2: By 2030, increase the percentage of breast cancer detected at an early stage from 72.5% to 80% (baseline: 2017 OCISS).

Strategies
- Increase provider education regarding the evaluation of patients for referral to high-risk specialists.
- Partner with community providers to encourage conversations regarding family cancer history.
- Utilize lay patient navigation to reduce barriers and support counseling. Encourage health systems to adopt at least key elements, if there is no dedicated personnel.

OBJECTIVE 3: By 2030, increase the percentage of women 50 to 74 years of age on Ohio Medicaid managed care plans, who had a mammogram from 53.7% to 70% (baseline: 2019 HEDIS Aggregate Report for the Ohio Medicaid Managed Care Program).

Strategies
- Actively partner with Ohio Medicaid managed care plans to improve breast cancer screening rates (e.g., quality improvement, education, access incentives).
- Advocate for the addition of breast cancer screening HEDIS (Healthcare Effectiveness Data and Information Set) measures as a pay-for-performance measure for Ohio Medicaid managed care plans.

William (Bill) Rubin

Columbus, 76

Pictured here with wife Janice in Columbus, 2012.

“Janice Ossa should have been a survivor. …

“Janice was health conscious, but she would not go for regular medical check-ups or screenings. She was my best friend, loving wife, and business partner. When she was diagnosed, she was already at stage 3, so we knew we had a battle on our hands. She fought with courage, dignity, and a sense of humor for two and a half years. Throughout, we received great medical care but equally important was the personal attention, information, and caring support that we got.

“Our kids, friends, relatives, and colleagues were always there to help whenever it was needed. The disease came and went away and then came back with a vengeance. The time we spent together in wound care at home, at chemo and radiation therapy, at the surgeon’s office, doing lymphatic massage, participating in the Komen Walk, and helping to plan weddings for two daughters was exhausting, but also brought us all even closer together. I miss her every day and I know I am not alone. I think cancer touches every one of us and that’s why being able to implement the components of the Ohio Cancer Plan is so important.”
Cervical Cancer

**OBJECTIVE 4:** By 2030, increase the percentage of women 21 to 65 years of age who have been screened for cervical cancer in accordance with United States Preventive Services Task Force recommendations, especially among groups experiencing disproportionate effects, including Appalachian and Hispanic women, to 85.0% (baseline: 2018 BRFSS, 79.2% for all women; 74.0% for Appalachian women; 73.4% for Hispanic women).

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Baseline (2018)</th>
<th>Target (2030)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Risk Factor Surveillance System All Women</td>
<td>79.2%</td>
<td>85.0%</td>
</tr>
<tr>
<td>Behavioral Risk Factor Surveillance System Appalachian</td>
<td>74.0%</td>
<td>85.0%</td>
</tr>
<tr>
<td>Behavioral Risk Factor Surveillance System Hispanic</td>
<td>73.4%</td>
<td>85.0%</td>
</tr>
</tbody>
</table>

**Strategies**

- Conduct a mass media (e.g., TV, radio, newspaper) campaign during Cervical Cancer Awareness Month (January) and Gynecologic Cancer Awareness Month (September) to educate and motivate women to have a cervical cancer screening.

- Train local women to provide one-on-one education to increase knowledge about cervical cancer screening and available services and resources to obtain screening.

- Educate healthcare providers and staff (via the Clinical Learning Collaborative) to provide clinical updates and best practice sharing, and pre-recorded presentations on cervical cancer screening and strategies to increase cervical cancer screening test rates.

- Utilize electronic health records (EHR) to implement clinic systems changes, including client reminder, recall systems, and provider reminders.

- Develop low-literacy educational materials in various languages (e.g., Spanish, Somali, Nepali, and Mandarin) to address language barriers among women to understand cervical cancer screening and available resources.
OBJECTIVE 5: By 2030, decrease the percentage of women diagnosed with cervical cancer at late stages (regional and distant stages), especially among groups experiencing disproportionate effects to 45% (baseline: 2017 OCISS, 51.1% for all women; 61.2% for African American women; 55.0% for women living in metropolitan counties; 54.9% for women living in Appalachian counties; 53.8% for Hispanic women.)

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Baseline</th>
<th>Target (2030)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio Cancer Incidence Surveillance System All Women</td>
<td>51.1%</td>
<td>45.0%</td>
</tr>
<tr>
<td>Ohio Cancer Incidence Surveillance System African American</td>
<td>61.2%</td>
<td>45.0%</td>
</tr>
<tr>
<td>Ohio Cancer Incidence Surveillance System Metro*</td>
<td>55.0%</td>
<td>45.0%</td>
</tr>
<tr>
<td>Ohio Cancer Incidence Surveillance System Appalachian</td>
<td>54.9%</td>
<td>45.0%</td>
</tr>
<tr>
<td>Ohio Cancer Incidence Surveillance System Hispanic</td>
<td>53.8%</td>
<td>45.0%</td>
</tr>
</tbody>
</table>

*Metropolitan counties include Cuyahoga, Franklin, Hamilton, Lucas, Montgomery, and Summit.

Strategies

- Work with clinical service providers to use patient navigation for women with abnormal screening results to improve adherence to diagnostic and care resolution.
- Establish guidelines and encourage policy makers to enact legislation to ensure women with abnormal results are not lost to follow-up care.
- Develop low-literacy educational materials in various languages (e.g., Spanish, Somali, Nepali, and Mandarin) to address language barriers to understand abnormal results and diagnostic care.
OBJECTIVE 6: By 2030, reduce the rate of invasive cervical cancer, especially among groups experiencing disproportionate effects, including Appalachian and Hispanic women to 7.5 per 100,000 people (baseline: 2017 OCISS, 7.9% for all women; 10.8% for all women living in Appalachian counties; 10.9% for all Hispanic women.)

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Baseline</th>
<th>Target (2030)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>7.9</td>
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<td>Ohio Cancer Incidence Surveillance System Appalachian</td>
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</tr>
<tr>
<td>Ohio Cancer Incidence Surveillance System Hispanic</td>
<td>10.9</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Strategies

- Establish a standard for follow-up care among women with abnormal results to receive diagnostic resolution within 60 days and start treatment within 60 days of diagnosis, especially among groups experiencing disproportionate effects.
- Promote patient navigation for patients needing diagnostic care and cervical cancer treatment.
- Provide education to healthcare professionals on the latest guidelines regarding follow-up care and treatment of cervical tissue cancer.
- Establish an HPV Pap Registry to monitor the complete continuum of cervical cancer prevention in Ohio.

Dawn D’Arcangelo

Cleveland, 47
Seven years cancer-free.
Stage 4b uterine cancer with spread to ovaries and omentum (nearby tissue), diagnosed July 2013, emergent radical hysterectomy, chemotherapy, targeted therapy.
Pictured here in January 2021.

“I am a partner, daughter, sister, aunt and friend; fighter, survivor, warrior; ovarian and uterine cancer advocate. ...”

“My life has forever changed, who I am mentally and personally. I live each day with a grateful heart and a will to help others fighting this disease.

“Ohio’s Cancer Plan helps so many people who are struggling from this disease. There are so many resources available that I didn’t know existed.

“I’m an advocate for using the Cancer Plan with all its resources and will continue to share it with others who are just diagnosed.”
Colorectal Cancer

OBJECTIVE 7: By 2030, increase the percentage of adults 50 to 75 years of age who receive a colorectal cancer screening based on the most recent United States Preventive Services Task Force guidelines from 67.2% to 80% (baseline: 2018 BRFSS).

OBJECTIVE 8: By 2030, reduce the rate of invasive colorectal cancer for people of all ages from 39.5 to 32.9 per 100,000 people (baseline: 2017 OCISS).

Strategies

• Provide colorectal cancer (CRC) screening education, including the availability of screening test options, through a variety of social media and printed media to build public awareness and demand for cancer screening.

• Implement tailored client reminders to inform patients who are due for CRC screening.

• Identify and promote free or reduced cost CRC screening options to low-income, uninsured, and underinsured individuals.

• Educate clinical providers on the benefits of recommending varied options for colorectal cancer screenings (e.g., colonoscopy, fecal occult blood test, fecal immunochemical test).

• Work with clinical service providers to promote the use of provider reminders and recall systems, including utilization of reminders in electronic health record systems.

• Work with partners, community organizations, and businesses to reduce structural barriers to screening (e.g., transportation solutions, counseling and patient navigation, flexible appointment hours, assistance with administrative process).

• Develop and implement a quality improvement process for healthcare providers that incorporates the evaluation of CRC cancer screening practices and feedback to improve CRC screening rates.

• Educate clinicians on the need for timely diagnostic testing for young adults who present with signs or symptoms of colorectal cancer and ensure that those patients receive a proper diagnostic work up.

• Educate all adults, including those under 50 years of age, about the signs or symptoms of colorectal cancer and empower them to talk to their doctor about being screened, providing tools that can facilitate the discussion (e.g., National Colorectal Roundtable tools and resources).

• Increase partnerships between healthcare organizations and non-healthcare organizations to lessen the negative effects of disparities in CRC cancer.

• Work with healthcare organizations to train physicians and their care teams to systematically screen their patients for essential needs, social risks, and to make appropriate referrals to additional services.
Lung Cancer

**OBJECTIVE 9:** Increase the percentage of individuals who have had a lung cancer screening based on the most recent United States Preventive Services Task Force guidelines from 5.2% to 15% by 2025 and 25% by 2030 (baseline: 2020 State of Lung Cancer Report, American Lung Association).

**Strategies**
- Institute policy change in Ohio Medicaid and Medicare coverage to recognize newly adopted United States Preventive Services Task Force recommended lung cancer screening guidelines.
- Promote efforts to compel health insurers and third-party payers to adopt a cost-free policy for lung cancer screening, especially to increase participation and remove any hindrance of payment or copayment, to increase access and facilitate adherence to screening guidelines.
- Increase the accuracy and availability of data regarding lung cancer screenings, particularly among groups placed at higher risk, and increased community sharing and cooperation between screening sites and stakeholders.
- Create and promote educational programs about lung cancer screening and treatment, with commensurate continuing medical education (CME) credit directed at healthcare providers.
- Create and utilize media and promotional toolkits to distribute and reproduce in order to reduce the stigma associated with lung cancer and increase awareness about lung cancer screening benefits and appropriate participation.

**OBJECTIVE 10:** By 2030, increase the percentage of Ohioans diagnosed with lung cancer at the local stage from 26% to 35% (baseline: 2017 OCISS).

**Strategies**
- Establish through the Ohio Department of Health a lung cancer project with specific attention and tactics to increase screening accessibility and participation in groups experiencing disproportionate effects.
- Increase the number of lung cancer screening sites; increase mobile access via mobile CT (computerized tomography) units, especially in southern Ohio Appalachian regions and underserved locations, and among populations with limited access to screening sites; and streamline the screening process from approval by insurers and providers to completion.
- Recruit health systems to promote and increase lung cancer screening, public awareness, and utilization of EMR (electronic medical record) and patient portals to trigger screening recommendations.
**OBJECTIVE 11:** By 2030, increase overall survival for individuals diagnosed with lung cancer in Ohio from 19% to 26.5% (baseline: 2009-2015 five-year relative survival).

**Strategies**

- Utilize health systems-based interventions and apply functional, automated, EMR assisted programs to alert, track, and provide appropriate follow-up care for pulmonary nodules seen on imaging according to guidelines.
- Promote reduction in time-lapse from lung cancer nodule detection to lung cancer diagnosis and initiation of appropriate treatment to improve outcomes, especially in groups experiencing disproportionate effects.
- Increase the number of patients tested who qualify for lung cancer-specific testing, including biologic marker, hereditary germline mutations, and tumor-specific next-generation sequencing to guide appropriate therapy.
- Increase awareness, understanding, and benefits of clinical trial participation, and promote increased participation by groups experiencing disproportionate effects.
- Directly educate disproportionately affected populations with educational material created explicitly for maximum cultural acceptance and understanding.

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**Carleen Taylor**

**Columbus, 60**

*Founder, Race for Hope; member, Ohio Partners For Cancer Control.*

*Lost 45-year-old friend Peggy to colon cancer, 2004.*

*Lost 23-year-old son Connor to colon cancer, 2016.*

*Pictured here in September 2020 with photo of Connor.*

“I have been an advocate for colorectal cancer awareness since 2004, when I started a 5K called Race for Hope to bring hope to my friend who was battling colorectal cancer. ... Sadly, she died three weeks before the first race at the age of 45, leaving behind four young boys the same ages as my four boys. ...”

“Then the unimaginable happened to us: After so many years of helping others, our 22-year-old son was diagnosed with stage 3 colorectal cancer in February 2016. ... In September of 2016, Connor was planning to start his master’s in public health because he wanted to help people and he wanted to make a difference. Instead, we buried him. ...”

“It is imperative to have a plan, a direction, a goal to stop this cancer in all age groups. The Ohio Cancer Plan provides the plan for early detection, it provides direction on reaching physicians and the general public. There is a goal to measure the effectiveness of the plan. We all need to work together to END this cancer.”
Prostate Cancer

**OBJECTIVE 12:** By 2030, decrease the prostate cancer mortality rate to less than or equal to 17 per 100,000 for all Ohio men in each racial/ethnic group (baseline: 2017 ODH Bureau of Vital Statistics).

### 2030 Prostate Cancer Health Equity Goal

To reach a mortality rate of 17/100,000 for all men*

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Mortality Rate per 100,000 People</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>17</td>
</tr>
<tr>
<td>Black</td>
<td>18.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7.3</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>9.5</td>
</tr>
</tbody>
</table>

Mortality rates expressed per 100,000 people. Rates shown from 2017.

* Rates shown are actual rates.

**Strategies**

- Use current census data, geospatial mapping tools, and market research data to identify areas at the census tract level with high percentages of African-American and Caucasian men over the age of 40 unlikely to visit a healthcare provider, to focus education and awareness activities in those locations.

- Partner with medical societies and healthcare systems in Ohio to offer primary care providers continuing education units to utilize appropriate risk assessment tools and provide comprehensive, consistent, and balanced information about prostate cancer screening to promote informed decision making for all men.

- Work with community groups that aim to increase levels of trust between African-American communities and healthcare systems.

- Work with Ohio cancer epidemiologists, the Ohio Hospital Association and other state level and community based organizations (e.g., National Medical Association, Black Nurse Associations, American Academy for Family Physicians) to identify or develop a surveillance method for measuring and tracking participation in prostate cancer screening by men at higher risk.

- Work with ODH epidemiologists to explain and disseminate the methodology for a threshold analysis (number to reach in order for a health intervention to be deemed successful) to effectively use data to help set measurable health equity targets.

- Work with clinical service providers in developing and implementing enhancements to system changes that improve prostate cancer screening, including but not limited to electronic medical record screening reminders and identifiers for men who are at higher risk, and increased screening data reporting to ODH.
OBJECTIVE 13: By 2030, increase the percentage of males 40 years of age and older who have had a discussion with their healthcare provider about the advantages and disadvantages of the PSA (prostate-specific antigen) test from 16.5% to 25.3% (baseline: 2018 BRFSS).

Strategies

• Strategically partner with community-based organizations (e.g., African-American Male Health Initiative, national medical organizations, Chief Diversity Officers in healthcare systems, local Offices of Minority Health coalitions) to provide prostate cancer education and emotional support.

• Educate Black men 40 years of age and older who are at higher risk for prostate cancer about prostate cancer risk factors, screening benefits and options, and the importance of consulting their healthcare providers and participating in shared decision making regarding prostate cancer screening.

• Support the development and implementation of pre-screening tools that seek to educate about prostate cancer risk factors and the benefits and risks of screening.

• Use a variety of culturally competent media to communicate prostate cancer screening information to diverse populations (e.g., Black men) in a variety of settings.

Donn Young, Ph.D.

Columbus, 60
Cancer researcher at The Ohio State University, Columbus; 13-year cancer survivor.
Metastatic prostate cancer, diagnosed 2006, enrolled in clinical trial.

“When I was diagnosed, I had a less than 50-50 chance of living three years. I have been one of the lucky few. It’s now over 13 years later and, while I continue treatment, I have continued an active life thanks to research done at the James. ... I have ridden in Pelotonia, got stuck in fog on the Buckeye Cruise for Cancer, and visited ancestors’ countries on a Scandinavian cruise with the OSU Alumni Association.

“All of this thanks to having access to cancer clinical trials encouraged by the Ohio Cancer Plan.”
GOAL: Optimize the Well-Being of Every Person Impacted by Cancer.

Cancer and Aging

OBJECTIVE 1: By 2030, conduct two statewide assessments among cancer specialists to determine rates of geriatric assessment, or components thereof (e.g., frailty and/or functional stratification) according to national guidelines.

Strategies
- Develop a system to evaluate if a geriatric assessment tool or components thereof are being used in older adult cancer care delivery.
- Analyze data collected from the statewide assessment to identify strengths and gaps in geriatric assessment use and delivery among older adults with cancer.
- Develop and implement educational programs to increase healthcare provider knowledge regarding a geriatric assessment.
- Work with existing community-based organizations to develop a comprehensive cancer and aging campaign for older adults with cancer.
- Evaluate Medicare geriatric assessment wellness exam rates among older adults with cancer.
- Create an online presence for Ohio that links to established national resources (e.g., National Comprehensive Cancer Network) and describes a geriatric assessment to increase awareness about comprehensive cancer care in concert with age-related health changes for patients, caregivers, and healthcare teams.

OBJECTIVE 2: By 2025, conduct two statewide assessments of cancer screening rates and guideline consistency for older adults with cancer (specifically cancer screening when less than or equal to 65 years of age and/or diagnosed with malignancy).

Strategies
- Develop an assessment tool to determine if healthcare providers are following older adult cancer screening recommendations.
- Analyze data collected from the statewide assessment to identify barriers and over- or under-screening among older adults with cancer.
- Conduct healthcare provider education events with targeted physician specialist groups regarding established cancer screening guidelines (e.g., National Comprehensive Cancer Network, Centers for Disease Control and Prevention, American Society of Clinical Oncology, American Society of Preventive Oncology).
- Develop and disseminate promotional materials to increase awareness about cancer screening services, including methods to locate local programs.
Delivery of Patient-Centered Services

**OBJECTIVE 3:** By 2030, conduct a grassroots statewide assessment of patient navigators and medically underserved populations to identify barriers contributing to lack of access to cancer support programs and community resources, and preferences for interventions to improve access (baseline=0; target=2).

**Strategies**
- Develop assessment and plan for distribution.
- Collect data and analyze results of assessment.

**OBJECTIVE 4:** By 2030, implement three activities to increase the percentage of adults from medically underserved populations who have access to cancer support programs and community resources (baseline=0; target=3).

**Strategies**
- Use results of statewide assessment of patient navigators and medically underserved populations to develop activities to increase the percentage of adults from medically underserved populations who have access to cancer support programs and community resources.
- Develop a database of survivorship programs and community resources for the OPCC website.
- Promote survivorship programs and community resources at community health events that reach medically underserved populations.
- Partner with employers of medically underserved communities to promote evidence-based cancer survivorship programs and resources to their employees.
OBJECTIVE 5: By 2030, increase the proportion of eligible adult cancer patients who enroll in clinical trials from 5.9% to 8%, focusing on survivors representing medically underserved populations (baseline: 2014 BRFSS).

Strategies

• Analyze BRFSS data to identify inequities in clinical trial enrollment.

• Develop educational resources about clinical trials for the OPCC website; promote the use of those resources to healthcare professionals and cancer support communities.

• Conduct an assessment of cancer patients to identify barriers to clinical trial participation; educate healthcare professionals about these barriers to facilitate reduction of barriers and increased clinical trial participation.

• Create a series of webinars to educate patients and care providers about cancer clinical trials including participation, phases, and community impact.

• Encourage researchers to broaden criteria for participation in clinical trials, including pediatric patients under 18, older adults, patients with central nervous system metastases, and patients with human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV) infections.

• Encourage Ohio researchers to include patient or caregiver input or support in the funding applications for clinical trials.

Ed Suszkowski

Cleveland, 74
Caregiver; advocate, University Hospitals Seidman Cancer Center.
Lost wife to ovarian cancer.
Pictured here at University Hospitals, 2018.

“My wife fought ovarian cancer for 11 years. The one thing that stood out to me was the lack of an advocate we could turn to for guidance; there was no one ‘who had been through this.’ After her passing, I decided I would be that person for Seidman Cancer Center. Patients and families need that ‘person’ to help them navigate and to address their concerns and fears. Patients and families are so appreciative and comfortable having someone to consult. Today (Jan. 12, 2021) at Seidman, I saw my 11,000th patient. Very rewarding indeed.”
Financial Burden and Barriers

OBJECTIVE 6: By 2030, increase the number of patients who report that they have discussed their healthcare costs with their provider prior to receiving treatment from 37% to 50% (baseline: 2017 Cancer Experience Registry).

Strategies
• Contact and connect with the largest healthcare systems in the state of Ohio to determine what procedures and policies are in place to inform patients of their financial responsibilities related to their care.
• Conduct a focus group or virtual questionnaire to gain insight into the need and value of financial transparency for cancer survivors and caregivers.
• Disseminate findings from the previous two strategies with relevant parties in Ohio via awareness raising campaigns and events (e.g., patient and provider fairs).

OBJECTIVE 7: By 2022, create and implement an assessment tool to measure and collect baseline data regarding telehealth and telemedicine’s role in reducing financial burden for cancer patients. By 2030, assess baseline data on telehealth and telemedicine’s role in reducing financial burden for cancer patients.

Strategies
• Establish and convene a diverse workgroup of experts to examine and assess telehealth’s role in the reduction of financial burden for cancer patients.
• Conduct a thorough review of the relevant literature and engage with community members via focus groups to assist in the production of a summary statement addressing the need and importance of this work.
• Implement an assessment tool throughout the state to gather data and establish baseline measurements.
• Analyze the data collected and develop a plan and timeline to apply the knowledge gained in a way that directly helps those with the aforementioned financial burdens in Ohio.
• Identify potential funding opportunities to assist in the implementation of these strategies.
OBJECTIVE 8: By 2030, increase the number of patients who enroll in the Breast and Cervical Cancer Project prior to obtaining their breast and/or cervical cancer screenings from 4,558 to 6,381 for breast cancer screenings and from 2,189 to 3,074 for cervical cancer screenings (baseline: 2019 MedIT).

Strategies

• Maintain continued conversation and relationship with ODH’s Breast and Cervical Cancer Project (BCCP) leadership regarding their needs and financial capacity to provide screenings and diagnostic testing.

• Organize and implement an annual or biennial campaign to bring awareness to the tax check-off donation option, in which individuals can choose to allocate all or a portion of their tax refunds to BCCP.

• Continue legislative advocacy efforts on behalf of BCCP to assist in sustaining and increasing BCCP-related funding.

• Identify individuals (e.g., volunteers) to help raise awareness among providers to encourage that they direct potentially eligible patients to enroll in BCCP prior to receiving screenings.

• As necessary, assist BCCP staff in identifying remaining providers throughout the geographic regions that are not yet contracted with BCCP to provide BCCP services.

Jillian Ripley

Mechanicsburg, 2005-2019
Fought osteosarcoma three times, diagnosed at age 11, died at age 14 in December 2020.
Pictured here with mom Julia and brother Jake in fall 2019.

“Jilly’s sassy nature mixed with her love and thoughtfulness for others, was simply magnetic. She was a best friend and role model to many of her fellow warriors and she had big dreams of running a nonprofit and helping other children in need. Cancer stole that dream, but her love and legacy lives on, motivating others to fight for pediatric cancer in her honor.” – Melissa James, friend and Feel Better Foundation founder.
Palliative Care and Hospice Care

**OBJECTIVE 9:** By 2030, increase the number of care professionals certified in hospice and palliative care by: 25% for physicians from 297 to 371, 40% for nurses from 1,634 to 2,288, and 50% for social workers from 102 to 153 (midway targets: 12% increase for physicians, 20% increase for nurses, and 25% increase for social workers).

**Strategies**
- Track hospice and palliative care (HAPC) certifications for physician assistants, pharmacists, and chaplains.
- Promote the benefits of becoming a HAPC-certified professional in Ohio.
- Focus on outpatient, home-based and community clinic-based palliative care in rural communities.
- Use the Center to Advance Palliative Care (CAPC) mapping tool to identify and target service areas with few or no palliative care services.

**OBJECTIVE 10:** By 2030, convene five educational sessions (e.g., webinar, conference, roundtable, breakout session, grand round) to increase awareness of the importance of an early assessment of Ohio cancer patients for palliative care need and referral to care.

**Strategies**
- Encourage all palliative care programs to report in the GetPalliativeCare.org provider directory.
- Increase the number of clinic-based palliative care and home-based programs to report in the GetPalliativeCare.org provider directory.
- Assess curriculum reform efforts to include a minimum number of instruction hours in palliative care communication skills and palliative care assessment and referral protocols.
- Support the existing National Comprehensive Cancer Network palliative care instrument by promoting it to Ohio listserv groups.
OBJECTIVE 11: By 2030, convene five educational sessions (e.g., webinar, conference, roundtable, breakout session, grand round) to increase public and clinician awareness of the difference between palliative care and hospice care in Ohio.

Strategies
- Encourage all palliative care programs to report in the GetPalliativeCare.org provider directory.
- Increase the number of clinic-based palliative care and home-based programs to report in the GetPalliativeCare.org provider directory.
- Assess curriculum reform efforts to include a minimum number of instruction hours in palliative care communication skills and palliative care assessment and referral protocols.
- Support the existing National Comprehensive Cancer Network palliative care instrument by promoting it to Ohio listserv groups.

Tori Geib
Bellefontaine, 1986-2021
Died at age 35 with metastatic breast cancer.

“At the time I was diagnosed, I had no idea that young people got or had a risk of dying of breast cancer. Upon my initial diagnosis, I heard from those around me that I was young and would surely ‘beat’ my cancer. Unfortunately, they couldn't have been more wrong. Breast cancer that leaves the breast is terminal, and at the time of my diagnosis – it had already spread to my bones, lungs, and liver. Over four years later, after multiple lines of treatment, it was also found that my breast cancer had spread to my brain. ...

"I credit my survival thus far to the continued research for metastatic breast cancer and the emphasis on quality of life through palliative care paired with my treatments. My journey – not unlike many patients – has been riddled with financial toxicity, insurance, access-to-care barriers, and side effects that have affected me as a whole person, beyond a mere cancer diagnosis. ...

"If willpower or choosing to ‘keep fighting’ was enough to keep me alive, I would be here forever. The truth is that research and palliative care are the only sure way I will be able to live a long life with a good quality of life far beyond my 35th birthday."

Whether Tori was teaching us how to make chai tiramisu or how to help advocate for metastatic breast cancer research and funding, she met everyone with the same passion for life. She is remembered for her warm smile, her ability to inspire, and her desire to live each day fully. She is missed by every individual she touched."
Pediatric Cancer

**OBJECTIVE 12:** By 2030, implement three or more new programs to better support pediatric cancer families medically and emotionally, as they transition from diagnosis, to treatment, to survivorship/palliative care.

**Strategies**
- Develop and support a pediatric cancer medical portal online that will house diverse resources available to all Ohio families and target underserved populations.
- Expand the use of the national long-term follow-up care program, “Passport for Care,” to enhance the tracking of demographics of families receiving survivorship care.
- Enhance existing peer-to-peer mentor programs, measuring the number of families utilizing them, and increase the number of referrals within underserved populations.

**OBJECTIVE 13:** By 2030, implement three or more new programs and/or processes that will reduce the financial impact on families of children, teens, and young adults with cancer in Ohio.

**Strategies**
- Expand awareness of the existing ODH Children with Medical Handicaps program by ensuring that resources are linguistically and culturally tailored and shared with underserved populations.
- Assemble and distribute resource folders that will share state assistance and nationwide and local resources with families that are newly diagnosed with pediatric cancer.
- Create an Ohio pediatric cancer collaborative, a diverse community of stakeholders, to share best practices, pain points, and health equity disparities.

**OBJECTIVE 14:** By 2030, hold two or more annual events to increase awareness for pediatric cancer with a greater emphasis on research, clinical trials, and effective treatment options.

**Strategies**
- Establish an annual campaign in September that will increase awareness of pediatric cancer and its challenges (e.g., effective treatment options, fertility, health equity disparities, and palliative care).
- Create an educational awareness plan with quarterly scheduled events.
- Host an annual Ohio Pediatric Cancer Summit with prominent speakers sharing data and innovative and supportive resources for those impacted by pediatric cancer.
Scarlett James

Columbus, 6
Fighting colorectal sarcoma, diagnosed at age 2, currently no evidence of disease (NED) and in maintenance therapy. Pictured here in fall 2020.

"I had cancer in my belly. My belly is better, but some of my friends are still sick. I wish they weren’t. I don’t want any more of my friends to go to heaven. I miss them when they have to go. Their mommies miss them.”
Call to Action

What YOU Can Do to Reduce the Burden of Cancer in Ohio
The Ohio Partners for Cancer Control (OPCC) coalition believes that preventing and controlling cancer requires individuals and organizations of all kinds to get involved and make contributions – however small they may seem.

This section contains ideas and activities for individuals and organizations to help reduce the burden of cancer in Ohio. All Ohioans can make a difference at home, at work, and in their communities. Use these suggested activities to take action today.

Please refer to the full list of goals, objectives, and strategies for more ideas of ways to reduce the burden of cancer in Ohio.

To become a member of the Ohio Partners for Cancer Control, please complete the membership application on the coalition website, [https://ohiocancerpartners.org/](https://ohiocancerpartners.org/).

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If you are an Ohioan

- If you use tobacco/nicotine, quit. If you don’t use tobacco, don’t start. Call the Ohio Tobacco Quit Line (1-800-QUIT-NOW) for help quitting.
- Achieve and maintain a healthy weight.
- Eat nutritious meals that include fruits, vegetables, and whole grains.
- Adopt a physically active lifestyle.
- Use sunscreen, monitor sun exposure, and avoid tanning devices.
- Limit alcohol use.
- Get cancer-preventive vaccines such as hepatitis B and HPV.
- If you are an adult, get screened for hepatitis C.
- Learn your family health history (when possible) and discuss with your healthcare provider whether genetic counseling might be right for you.
- Discuss with your healthcare provider what cancer screenings (e.g., breast, cervical, colorectal, lung, prostate) might be right for you.
- Test your home for radon.
- Volunteer your time and other resources to cancer organizations and events.
Call to Action

If you are a healthcare provider

- Routinely assess patients for lifestyle factors, including alcohol and tobacco/nicotine use, physical activity, diet, vaccinations and in-home radon testing.
- Provide culturally relevant counseling, information, and referrals for cancer screening tests.
- Ensure patients are screened for cancer in accordance with the most current guidelines and implement a cancer screening reminder system.
- Adhere to guidelines and best practices for cancer prevention, treatment, and supportive care.
- Refer and encourage patients to enroll in cancer clinical trials.
- Incorporate palliative care into your practice and make timely referrals to hospice.
- Provide cancer patients with a written summary of their care plan.
- Submit complete cancer case reports in a timely manner to the Ohio Cancer Incidence Surveillance System (OCISS).
- Provide ongoing resources to the entire healthcare workforce about considerations working with groups experiencing disproportionate effects.

Call to Action

If you are a healthcare organization

- Implement 100% tobacco-free grounds and campus policies.
- Implement office-based reminders that identify patients due for cancer prevention and screening services.
- Sponsor patient navigation and survivorship programs.
- Offer clinical cancer research opportunities to patients.
- Provide ongoing resources to the entire healthcare workforce about considerations working with groups experiencing disproportionate effects.
- Distribute culturally and linguistically appropriate cancer prevention, screening, treatment, survivorship, and palliative care services information.
- Help develop and expand educational options for new and potential healthcare oncology workers.
- Submit complete cancer case reports in a timely manner to OCISS.
- Seek or maintain accreditation through American College of Surgeons and The Joint Commission on Cancer.
- Ensure that all Ohioans have access to healthcare screening, early detection services, and treatment.
If you are a local health department

• Support policy, environmental, and systems changes for cancer prevention and control.
• Provide information about cancer prevention and screening programs in the community.
• Partner with local healthcare systems to provide patient navigation services for clients and access to low-cost cancer screening.
• Provide information on how to access low-cost radon test kits.
• Collaborate on community wellness activities and awareness events.
• Provide meeting space for cancer support and survivorship groups.

If you are a community or faith-based organization

• Promote healthy practices among community members by promoting tobacco/nicotine cessation and providing healthy foods at activities and events.
• Provide cancer prevention information to members/clients.
• Partner with local healthcare partners to provide programs in the community on cancer prevention and screening, especially among local populations facing health disparities.
• Sponsor a health fair, cancer awareness campaign, or community forum in collaboration with community partners.
• Promote or provide activities specifically for cancer survivors and their families.
• Encourage participation in clinical trials.
Call to Action

If you are an employer

• Institute and promote healthy policies: make your organization a 100% tobacco-free campus; provide healthy foods at meetings and in vending machines and cafeterias; and encourage employees to increase physical activity.
• Offer paid time off for cancer screenings.
• If you provide employees with insurance coverage, select products that cover cancer prevention and screening services with no cost sharing; also consider tele-health options.
• Collaborate with healthcare institutions to host screening events.
• Establish a worksite wellness committee.
• Provide protective clothing, equipment, and sun safety protections to employees to reduce exposure to carcinogens.
• Provide information to cancer survivors and their co-workers about issues faced as survivors return to work.
• Seek to join or maintain membership in the Healthy Business Council of Ohio and work toward achieving the “Cancer Screening Excellence Award.”

Call to Action

If you are a policy maker or an elected official

• Raise constituents’ awareness about cancer prevention and control programs in your district and help support and establish new programs where needed.
• Sponsor or support policies and funding that promote cancer research, prevention, and control (e.g., expansion of smoke-free laws, increase excise tax on cigarettes/e-cigarettes, tanning device restrictions for teens).
• Ensure that all Ohioans have access to healthcare screening, early detection services, treatment, and supportive care.
If you are a school or institute of higher education

- Make your campus a 100% tobacco-free environment.
- Provide healthy foods in vending machines, cafeterias, and dining halls.
- Meet or exceed physical education requirements.
- Encourage sun-safe behaviors and discourage indoor tanning device usage.
- Include cancer prevention and screening messages in health classes.
- Open select facilities to the community for walking and other physical activity during off hours.
- Sponsor a health fair, cancer awareness campaign, or educational seminar in collaboration with community partners.
- Institute policies that promote health and wellness among employees and students, such as employee benefit packages that include comprehensive cancer coverage.
- Support research studies to reduce health disparities due to factors such as socioeconomic status, ethnicity, race, age, disability, sexual orientation and gender identity, and health literacy.
### Table 1. New Invasive Cancer Cases and Incidence Rates by Cancer Site/Type and Sex, Ohio, 2017¹²³

<table>
<thead>
<tr>
<th>Primary Cancer Site/Type</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
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<tr>
<td></td>
<td>Cases</td>
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<tr>
<td>All Cancer Sites/Types</td>
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<td>Cervix</td>
<td>NA</td>
<td>NA</td>
<td>491</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>2,953</td>
<td>44.4</td>
<td>2,789</td>
</tr>
<tr>
<td>Esophagus</td>
<td>660</td>
<td>9.5</td>
<td>154</td>
</tr>
<tr>
<td>Hodgkin’s Lymphoma</td>
<td>165</td>
<td>2.8</td>
<td>164</td>
</tr>
<tr>
<td>Kidney and Renal Pelvis</td>
<td>1,551</td>
<td>23.3</td>
<td>958</td>
</tr>
<tr>
<td>Larynx</td>
<td>443</td>
<td>6.2</td>
<td>148</td>
</tr>
<tr>
<td>Leukemia</td>
<td>967</td>
<td>15.1</td>
<td>693</td>
</tr>
<tr>
<td>Liver and Intrahepatic Bile Duct</td>
<td>788</td>
<td>10.8</td>
<td>334</td>
</tr>
<tr>
<td>Lung and Bronchus</td>
<td>5,156</td>
<td>75.0</td>
<td>4,586</td>
</tr>
<tr>
<td>Melanoma of Skin</td>
<td>1,969</td>
<td>30.3</td>
<td>1,373</td>
</tr>
<tr>
<td>Multiple Myeloma</td>
<td>486</td>
<td>7.3</td>
<td>383</td>
</tr>
<tr>
<td>Non-Hodgkin’s Lymphoma</td>
<td>1,520</td>
<td>23.2</td>
<td>1,204</td>
</tr>
<tr>
<td>Oral Cavity and Pharynx</td>
<td>1,296</td>
<td>18.6</td>
<td>536</td>
</tr>
<tr>
<td>Ovary</td>
<td>NA</td>
<td>NA</td>
<td>761</td>
</tr>
<tr>
<td>Pancreas</td>
<td>1,048</td>
<td>15.5</td>
<td>908</td>
</tr>
<tr>
<td>Prostate</td>
<td>8,155</td>
<td>109.9</td>
<td>NA</td>
</tr>
<tr>
<td>Stomach</td>
<td>565</td>
<td>8.5</td>
<td>309</td>
</tr>
<tr>
<td>Testis</td>
<td>278</td>
<td>5.2</td>
<td>NA</td>
</tr>
<tr>
<td>Thyroid</td>
<td>457</td>
<td>7.3</td>
<td>1,385</td>
</tr>
<tr>
<td>Uterus</td>
<td>NA</td>
<td>NA</td>
<td>2,558</td>
</tr>
</tbody>
</table>


²Rates are per 100,000 and age-adjusted to the 2000 U.S. standard population.

³Total excludes three cases with other or unknown sex.

NA = Not applicable; sex-specific cancer.

CNS = central nervous system.
## Appendix

Table 2. Cancer Deaths and Mortality Rates by Cancer Site/Type and Sex, Ohio, 2017\(^1,2\).

<table>
<thead>
<tr>
<th>Primary Cancer Site/Type</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deaths</td>
<td>Rate</td>
<td>Deaths</td>
</tr>
<tr>
<td>All Cancer Sites/Types</td>
<td>13,435</td>
<td>204.2</td>
<td>12,212</td>
</tr>
<tr>
<td>Bladder</td>
<td>490</td>
<td>7.9</td>
<td>236</td>
</tr>
<tr>
<td>Brain and Other CNS</td>
<td>370</td>
<td>5.5</td>
<td>324</td>
</tr>
<tr>
<td>Breast</td>
<td>22</td>
<td>0.3</td>
<td>1,758</td>
</tr>
<tr>
<td>Cervix</td>
<td>NA</td>
<td>NA</td>
<td>174</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>1,140</td>
<td>17.8</td>
<td>1,065</td>
</tr>
<tr>
<td>Esophagus</td>
<td>582</td>
<td>8.4</td>
<td>141</td>
</tr>
<tr>
<td>Hodgkin's Lymphoma</td>
<td>32</td>
<td>0.5</td>
<td>12</td>
</tr>
<tr>
<td>Kidney and Renal Pelvis</td>
<td>362</td>
<td>5.5</td>
<td>236</td>
</tr>
<tr>
<td>Larynx</td>
<td>135</td>
<td>1.9</td>
<td>52</td>
</tr>
<tr>
<td>Leukemia</td>
<td>574</td>
<td>9.1</td>
<td>420</td>
</tr>
<tr>
<td>Liver and Intrahepatic Bile Duct</td>
<td>661</td>
<td>9.4</td>
<td>356</td>
</tr>
<tr>
<td>Lung and Bronchus</td>
<td>3,769</td>
<td>55.8</td>
<td>3,026</td>
</tr>
<tr>
<td>Melanoma of Skin</td>
<td>253</td>
<td>3.9</td>
<td>131</td>
</tr>
<tr>
<td>Multiple Myeloma</td>
<td>325</td>
<td>5.0</td>
<td>209</td>
</tr>
<tr>
<td>Non-Hodgkin's Lymphoma</td>
<td>479</td>
<td>7.7</td>
<td>380</td>
</tr>
<tr>
<td>Oral Cavity and Pharynx</td>
<td>292</td>
<td>4.2</td>
<td>131</td>
</tr>
<tr>
<td>Ovary</td>
<td>NA</td>
<td>NA</td>
<td>548</td>
</tr>
<tr>
<td>Pancreas</td>
<td>965</td>
<td>14.4</td>
<td>890</td>
</tr>
<tr>
<td>Prostate</td>
<td>1,211</td>
<td>19.5</td>
<td>NA</td>
</tr>
<tr>
<td>Stomach</td>
<td>213</td>
<td>3.3</td>
<td>151</td>
</tr>
<tr>
<td>Testis</td>
<td>16</td>
<td>0.3</td>
<td>NA</td>
</tr>
<tr>
<td>Thyroid</td>
<td>21</td>
<td>0.3</td>
<td>41</td>
</tr>
<tr>
<td>Uterus</td>
<td>NA</td>
<td>NA</td>
<td>471</td>
</tr>
</tbody>
</table>

\(^1\)Source: Chronic Disease Epidemiology and Evaluation Section and the Office of Vital Statistics, Ohio Department of Health, 2015.

\(^2\)Rates are per 100,000 and age-adjusted to the 2000 U.S. standard population.

NA = Not applicable; sex-specific cancer.

CNS = central nervous system.
### Table 3. New Invasive Cancer Cases and Incidence Rates by Cancer Site/Type and Race, Ohio, 2017\(^1,2\)

<table>
<thead>
<tr>
<th>Primary Cancer Site/Type</th>
<th>White Cases</th>
<th>White Rate</th>
<th>Black Cases</th>
<th>Black Rate</th>
<th>Asian/Pacific Islander Cases</th>
<th>Asian/Pacific Islander Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Cancer Sites/Types</td>
<td>58,551</td>
<td>456.0</td>
<td>6,730</td>
<td>439.0</td>
<td>543</td>
<td>226.7</td>
</tr>
<tr>
<td>Bladder</td>
<td>2,952</td>
<td>22.0</td>
<td>190</td>
<td>12.9</td>
<td>19</td>
<td>9.6</td>
</tr>
<tr>
<td>Brain and Other CNS</td>
<td>847</td>
<td>7.5</td>
<td>73</td>
<td>4.6</td>
<td>5</td>
<td>1.9</td>
</tr>
<tr>
<td>Breast</td>
<td>8,564</td>
<td>130.0</td>
<td>1,062</td>
<td>127.3</td>
<td>114</td>
<td>82.1</td>
</tr>
<tr>
<td>Cervix</td>
<td>407</td>
<td>8.1</td>
<td>62</td>
<td>7.8</td>
<td>6</td>
<td>4.3</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>5,034</td>
<td>39.5</td>
<td>554</td>
<td>36.5</td>
<td>42</td>
<td>16.8</td>
</tr>
<tr>
<td>Esophagus</td>
<td>750</td>
<td>5.5</td>
<td>52</td>
<td>3.4</td>
<td>4</td>
<td>*</td>
</tr>
<tr>
<td>Hodgkin’s Lymphoma</td>
<td>286</td>
<td>2.8</td>
<td>32</td>
<td>1.9</td>
<td>3</td>
<td>*</td>
</tr>
<tr>
<td>Kidney and Renal Pelvis</td>
<td>2,196</td>
<td>17.6</td>
<td>276</td>
<td>18.5</td>
<td>12</td>
<td>5.0</td>
</tr>
<tr>
<td>Larynx</td>
<td>511</td>
<td>3.8</td>
<td>76</td>
<td>4.9</td>
<td>3</td>
<td>*</td>
</tr>
<tr>
<td>Leukemia</td>
<td>1,454</td>
<td>11.8</td>
<td>134</td>
<td>9.0</td>
<td>17</td>
<td>6.2</td>
</tr>
<tr>
<td>Liver and Intrahepatic Bile Duct</td>
<td>901</td>
<td>6.6</td>
<td>186</td>
<td>11.2</td>
<td>22</td>
<td>8.6</td>
</tr>
<tr>
<td>Lung and Bronchus</td>
<td>8,621</td>
<td>63.9</td>
<td>1,028</td>
<td>67.7</td>
<td>61</td>
<td>29.2</td>
</tr>
<tr>
<td>Melanoma of Skin</td>
<td>2,965</td>
<td>24.3</td>
<td>9</td>
<td>0.6</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>Multiple Myeloma</td>
<td>654</td>
<td>5.0</td>
<td>183</td>
<td>12.3</td>
<td>7</td>
<td>3.6</td>
</tr>
<tr>
<td>Non-Hodgkin’s Lymphoma</td>
<td>2,453</td>
<td>19.2</td>
<td>194</td>
<td>13.0</td>
<td>29</td>
<td>13.1</td>
</tr>
<tr>
<td>Oral Cavity and Pharynx</td>
<td>1,647</td>
<td>12.8</td>
<td>148</td>
<td>9.6</td>
<td>19</td>
<td>7.9</td>
</tr>
<tr>
<td>Ovary</td>
<td>687</td>
<td>10.5</td>
<td>61</td>
<td>7.1</td>
<td>7</td>
<td>4.5</td>
</tr>
<tr>
<td>Pancreas</td>
<td>1,686</td>
<td>12.7</td>
<td>242</td>
<td>16.3</td>
<td>13</td>
<td>6.1</td>
</tr>
<tr>
<td>Prostate</td>
<td>6,638</td>
<td>100.9</td>
<td>1,090</td>
<td>149.3</td>
<td>39</td>
<td>35.9</td>
</tr>
<tr>
<td>Stomach</td>
<td>700</td>
<td>5.4</td>
<td>139</td>
<td>9.9</td>
<td>22</td>
<td>9.7</td>
</tr>
<tr>
<td>Testis</td>
<td>257</td>
<td>5.8</td>
<td>8</td>
<td>1.2</td>
<td>5</td>
<td>2.7</td>
</tr>
<tr>
<td>Thyroid</td>
<td>1,620</td>
<td>15.5</td>
<td>167</td>
<td>11.1</td>
<td>26</td>
<td>9.5</td>
</tr>
<tr>
<td>Uterus</td>
<td>2,270</td>
<td>32.9</td>
<td>235</td>
<td>26.7</td>
<td>27</td>
<td>18.4</td>
</tr>
</tbody>
</table>


\(^2\)Rates are per 100,000 people and age-adjusted to the 2000 U.S. standard population. Rates are sex-specific for cancers of the breast, cervix, ovary, prostate, testis and uterus.

\* Rates may be unstable and are not presented when the count is less than five.

CNS = Central nervous system.
### Appendix

Table 4. Cancer Deaths and Mortality Rates by Cancer Site/Type and Race, Ohio, 2017\(^1\),\(^2\).

<table>
<thead>
<tr>
<th>Primary Cancer Site/Type</th>
<th>White</th>
<th></th>
<th>Black</th>
<th></th>
<th>Asian/Pacific Islander</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deaths</td>
<td>Rate</td>
<td>Deaths</td>
<td>Rate</td>
<td>Deaths</td>
<td>Rate</td>
</tr>
<tr>
<td>All Cancer Sites/Types</td>
<td>22,501</td>
<td>169.7</td>
<td>2,885</td>
<td>194.4</td>
<td>169</td>
<td>85.3</td>
</tr>
<tr>
<td>Bladder</td>
<td>660</td>
<td>4.9</td>
<td>59</td>
<td>4.1</td>
<td>4</td>
<td>*</td>
</tr>
<tr>
<td>Brain and Other CNS</td>
<td>635</td>
<td>5.1</td>
<td>49</td>
<td>3.3</td>
<td>7</td>
<td>2.9</td>
</tr>
<tr>
<td>Breast</td>
<td>1,503</td>
<td>21.4</td>
<td>233</td>
<td>27.3</td>
<td>13</td>
<td>10.2</td>
</tr>
<tr>
<td>Cervix</td>
<td>151</td>
<td>2.5</td>
<td>20</td>
<td>2.2</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>1,915</td>
<td>14.7</td>
<td>275</td>
<td>18.8</td>
<td>11</td>
<td>5.2</td>
</tr>
<tr>
<td>Esophagus</td>
<td>667</td>
<td>4.9</td>
<td>50</td>
<td>3.1</td>
<td>5</td>
<td>2.7</td>
</tr>
<tr>
<td>Hodgkin’s Lymphoma</td>
<td>40</td>
<td>0.3</td>
<td>4</td>
<td>*</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Kidney and Renal Pelvis</td>
<td>545</td>
<td>4.1</td>
<td>51</td>
<td>3.4</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Larynx</td>
<td>154</td>
<td>1.1</td>
<td>31</td>
<td>2.2</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>Leukemia</td>
<td>892</td>
<td>6.9</td>
<td>85</td>
<td>5.8</td>
<td>11</td>
<td>4.8</td>
</tr>
<tr>
<td>Liver and Intrahepatic Bile Duct</td>
<td>821</td>
<td>6.1</td>
<td>176</td>
<td>10.6</td>
<td>10</td>
<td>5.2</td>
</tr>
<tr>
<td>Lung and Bronchus</td>
<td>6,008</td>
<td>44.7</td>
<td>713</td>
<td>47.1</td>
<td>55</td>
<td>29.4</td>
</tr>
<tr>
<td>Melanoma of Skin</td>
<td>379</td>
<td>3.0</td>
<td>5</td>
<td>0.4</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Multiple Myeloma</td>
<td>435</td>
<td>3.3</td>
<td>95</td>
<td>6.6</td>
<td>3</td>
<td>*</td>
</tr>
<tr>
<td>Non-Hodgkin’s Lymphoma</td>
<td>792</td>
<td>6.0</td>
<td>58</td>
<td>4.3</td>
<td>5</td>
<td>3.4</td>
</tr>
<tr>
<td>Oral Cavity and Pharynx</td>
<td>380</td>
<td>2.8</td>
<td>40</td>
<td>2.8</td>
<td>3</td>
<td>*</td>
</tr>
<tr>
<td>Ovary</td>
<td>496</td>
<td>6.8</td>
<td>49</td>
<td>5.7</td>
<td>3</td>
<td>*</td>
</tr>
<tr>
<td>Pancreas</td>
<td>1,613</td>
<td>12.0</td>
<td>228</td>
<td>15.2</td>
<td>7</td>
<td>3.5</td>
</tr>
<tr>
<td>Prostate</td>
<td>1,005</td>
<td>18.1</td>
<td>202</td>
<td>37.4</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>Stomach</td>
<td>291</td>
<td>2.2</td>
<td>60</td>
<td>4.2</td>
<td>9</td>
<td>4.4</td>
</tr>
<tr>
<td>Testis</td>
<td>15</td>
<td>0.3</td>
<td>1</td>
<td>*</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Thyroid</td>
<td>57</td>
<td>0.4</td>
<td>5</td>
<td>0.4</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Uterus</td>
<td>398</td>
<td>5.3</td>
<td>68</td>
<td>8.2</td>
<td>2</td>
<td>*</td>
</tr>
</tbody>
</table>


\(^2\)Rates are per 100,000 people and age-adjusted to the 2000 U.S. standard population. Rates are sex-specific for cancers of the breast, cervix, ovary, prostate, testis and uterus.

* Rates may be unstable and are not presented when the count is less than five.

CNS = Central nervous system.
Glossary

**Behavioral Risk Factor Surveillance System (BRFSS)**
BRFSS is the nation’s premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. Established in 1984 with 15 states, BRFSS now collects data in all 50 states as well as the District of Columbia and three U.S. territories. BRFSS completes more than 400,000 adult interviews each year, making it the largest continuously conducted health survey system in the world. In 2009, BRFSS began conducting surveys by cellular phone, in addition to traditional landline telephone.

**Clinical Institute Withdrawal Assessment for Alcohol (CIWA)**
The Clinical Institute Withdrawal Assessment for Alcohol, commonly abbreviated as CIWA or CIWA-Ar, is a 10-item scale used in the assessment and management of alcohol withdrawal.

**Healthcare Effectiveness Data and Information Set (HEDIS)**
The Healthcare Effectiveness Data and Information Set is a widely used set of performance measures in the managed care industry, developed and maintained by the National Committee for Quality Assurance.

**Incidence rate**
An incidence rate is the number of new cases of a disease divided by the number of persons at risk for the disease. For example, the incidence rate of liver cancer is 7.2 per 100,000 persons.

**Ohio Cancer Incidence Surveillance System (OCISS)**
The Ohio Cancer Incidence Surveillance System (OCISS) is Ohio’s central cancer registry. OCISS collects and analyzes cancer incidence data on all Ohio residents.

**Palliative care**
Palliative care is specialized medical care for people living with a serious illness. This type of care is focused on providing relief from the symptoms and stress of the illness. The goal is to improve quality of life for both the patient and the family. Palliative care is provided by a specially trained team of doctors, nurses, and other specialists who work together with a patient’s other doctors to provide an extra layer of support. Palliative care is based on the needs of the patient, not on the patient’s prognosis. It is appropriate at any age and at any stage in a serious illness, and it can be provided along with curative treatment.
Glossary

**PSE (Policy, systems, and environmental change)**
Policy, systems and environmental (PSE) approaches are laws, rules, and/or related actions that impact behavior. In the past, health programs focused on changing individual behavior whereas PSE approaches have a far-reaching impact by changing laws and creating sustainable, comprehensive measures to improve health.

**United States Preventive Services Task Force (USPSTF)**
The U.S. Preventive Services Task Force is an independent, volunteer panel of national experts in disease prevention and evidence-based medicine. The Task Force works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services.

**Youth Risk Behavior Surveillance System (YRBS or YRBSS)**
The Youth Risk Behavior Surveillance System monitors six categories of health-related behaviors that contribute to the leading causes of death and disability among youth and adults. YRBSS also measures the prevalence of obesity and asthma and other health-related behaviors plus sexual identity and sex of sexual contacts. YRBSS is a system of surveys. It includes 1) a national school-based survey conducted by CDC and state, territorial, and tribal governments, and 2) local surveys conducted by state, territorial, and local education and health agencies and tribal governments.
List of Ohio Partners

Stakeholders Participating in the Development of the Plan

Organizations

A Kid Again
Advance Urology and Continence Center
African American Male Wellness Agency
American Academy of Pediatrics, Ohio Chapter
American Cancer Society, Inc.
American College of Surgeons, Commission on Cancer
Blanchard Valley Health System
Brave Men, Inc.
Cancer Support Community Central Ohio
Case Western Reserve University
City of Toledo Fire and Rescue
Cleveland Clinic
Coalition Against Childhood Cancer
Columbus Oncology and Hematology Associates
Dr. Joe Explains
Equitas Health
Feel Better Foundation
Fulton County Health Center
Genesis Healthcare System, Cancer Care Center
Kent State University College of Public Health
Knox Community Cancer Services
LifeCare Alliance
Louis Stokes Cleveland Veterans Affairs Medical Center
Melanoma Know More
Mercy Health - St. Rita’s Medical Center
Mount Carmel Health System
Nationwide Children’s Hospital
Ohio Academy of Family Physicians
Ohio Association of Community Health Centers
Ohio Commission on Minority Health
Ohio Department of Health
Ohio Department of Mental Health and Addiction Services
Ohio Dermatological Association
Ohio State Medical Association
## List of Ohio Partners

<table>
<thead>
<tr>
<th>Organization/Individual</th>
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<tbody>
<tr>
<td>Ohio State Society of Medical Assistants</td>
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<tr>
<td>OhioHealth</td>
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<tr>
<td>Ohio University</td>
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<tr>
<td>Paramount Health Care</td>
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<td>Premier Health Partners</td>
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<tr>
<td>ProMedica Health System</td>
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<tr>
<td>Race for Hope</td>
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<tr>
<td>Southern Ohio Medical Center</td>
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<tr>
<td>Springfield Regional Medical Center</td>
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<tr>
<td>St. Vincent Medical Center– Mercy Health</td>
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<tr>
<td>Summa Health System</td>
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<tr>
<td>Susan G. Komen, Columbus</td>
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<tr>
<td>Susan G. Komen, Northwest Ohio</td>
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<tr>
<td>The Crawford Crew Foundation</td>
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<tr>
<td>The Gathering Place, Touched by Cancer</td>
</tr>
<tr>
<td>The Ohio State University Wexner Medical Center, James Cancer Hospital &amp; Solove Research Institute</td>
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<tr>
<td>The Ohio State University, College of Medicine</td>
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<tr>
<td>The Ohio State University, College of Nursing</td>
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<tr>
<td>The Toledo Clinic</td>
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<tr>
<td>Tobacco Free Ohio Alliance</td>
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<tr>
<td>City of Toledo Fire and Rescue</td>
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<tr>
<td>University Hospital of Cleveland, Cancer Center</td>
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<td>University Hospitals Seidman Cancer Center</td>
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<tr>
<td>University of Toledo Medical Center</td>
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<tr>
<td>Young Survival Coalition</td>
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</tbody>
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### Individual Members

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Denise Binion</td>
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<tr>
<td>Erin Brigham</td>
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<tr>
<td>Megan Coburn</td>
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<tr>
<td>Stephanie Davis-Dieringer</td>
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<tr>
<td>Kathy Derr</td>
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<tr>
<td>Zoe Fawcett Freggens, MA</td>
</tr>
<tr>
<td>Michelle Johnson</td>
</tr>
<tr>
<td>Ann Ramer, MPH</td>
</tr>
<tr>
<td>Linda Scovorn, MPH, RD, LD, PAPHS</td>
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</tbody>
</table>
If you are a school or institute of higher education...