THE OHIO COMPREHENSIVE CANCER CONTROL PLAN 2015-2020

Ohio Partners for Cancer Control
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The Ohio Partners for Cancer Control
c/o Ohio Comprehensive Cancer Control Program
Ohio Department of Health
246 North High Street
Columbus, Ohio 43215

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DEDICATION

The Ohio Comprehensive Cancer Control Plan 2015-2020 is dedicated to all Ohioans whose lives have been affected by cancer.

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ACKNOWLEDGMENTS

The Ohio Comprehensive Cancer Control Plan 2015-2020 could not have been written without the dedication, expertise, and hard work of many professionals who gave of their time and talent to set priorities for cancer surveillance, prevention and control. Many thanks to the organizations, agencies, programs and individuals who worked together to develop the content, objectives, strategies and data measures presented in this plan. Special thanks to Karin Hohman and Leslie Given of Strategic Health Concepts for their patience and technical assistance.

"A Cancer-Free Future for All Ohioans"

EXECUTIVE SUMMARY

Ohio's Comprehensive Cancer Control Plan 2015-2020 (The Cancer Plan) is a strategic plan to reduce the cancer burden in the state. It is designed to provide guidance to individuals and organizations spanning a wide range of health and social disciplines that can play a role in controlling cancer. Several aspects of the cancer continuum are addressed. These aspects include primary prevention, screening and early detection, and patient-centered services involving treatment, quality of life and end-of-life care.

The Cancer Plan has three guiding principles that cut across all three goals and related objectives:

- **Make data-driven decisions;**
- **Use evidence-based interventions, and;**
- **Identify and address cancer disparities and achieve health equity.**

The Cancer Plan's strategies are intended to direct collective efforts toward specific and measurable objectives that will reduce the cancer burden in Ohio. Many of the outcomes will have benefits extending beyond cancer to other leading causes of death, as it aligns with the statewide chronic disease plan, "Ohio's Plan to Prevent and Reduce Chronic Disease 2014-2018" (http://www.healthy.ohio.gov/CDPlan).

The Cancer Plan was developed using the CDC's National Comprehensive Cancer Control Program Priorities. Objectives and strategies that fall under each of the six priorities, summarized below, can be found throughout the plan.

Emphasize Primary Prevention of Cancer.
Cancer risk can be reduced by receiving regular medical care, avoiding tobacco, eating a diet rich in fruits and vegetables, avoiding Ultraviolet (UV) rays from tanning beds and sunlight, mitigating radon in homes, maintaining a healthy weight and getting physically active, among other actions.

Support Early Detection and Treatment Activities.
Getting regular, recommended cancer screenings may identify breast, cervical, colorectal and lung cancers early, when treatment is most likely to be successful. In addition, screening and diagnostic procedures for cervical and colorectal cancers may prevent cancers by removing precancerous cells. The CDC supports cancer screenings, as recommended by the U.S. Preventive Services Task Force (USPSTF) (http://www.uspreventiveservicestaskforce.org/).

Address Public Health Needs of Cancer Survivors.

A cancer survivor is a person diagnosed with cancer, from the moment of diagnosis throughout his or her life. To reduce the overall impact and burden of cancer, public health, medical and community organizations must work together to address the effects of diagnosis, treatment and other interventions on the health and well-being of survivors and their support systems. Patient-centered care must be provided to optimize the physical and psychosocial health of survivors.

Implement Policy, Systems and Environmental (PSE) Changes to Guide Sustainable Cancer Control.

Broad, long-lasting PSE interventions are required to achieve long term success in minimizing cancer burden at the local, state, federal and global levels.

Type of Change	Definition	Examples
Policy	Interventions or actions that amend laws, ordinances, mandates, rules or regulations.	Tax increases for tobacco and other tobacco products, tanning bed laws/rules, radon mitigation building codes
Systems	Interventions or actions that change the rules and activities within an organization; system changes often work hand-in-hand with policy changes	Automating reminder/ recall for cancer screenings across a healthcare organization, providing incentives for workplace wellness programs, implementing system-wide hospice referral process
Environmental	Interventions or actions that make physical or substantive changes to the physical, economic, or social environment	Building community walking paths, reducing geographic barriers to screening through the use of mobile mammography, making fresh fruits and vegetables available in food desert areas

Promote Health Equity as it Relates to Cancer Control.

While overall health and life expectancy are improving for most Ohioans, everyone is not benefiting equally. Factors including race, gender, sexual identity, socioeconomic status and geographic location are associated with increased cancer incidence and mortality. Trends and patterns are monitored to identify groups disproportionately affected by cancer.

Demonstrate Outcomes through Evaluation.

Measurable objectives were developed as a result of evaluating the outcomes of *The Ohio Comprehensive Cancer Plan 2011-2014* and to prepare for data-driven evaluation of this Cancer Plan. The results of annual evaluation activities will guide future interventions to address the burden of cancer in Ohio.

> The *Ohio Comprehensive Cancer Control Plan 2015-2020* is a living document. As new information and strategies to address cancer evolve, so will this plan. Updates will be posted as they occur. Visit www.odh.ohio.gov to view the ever-changing version of the Cancer Plan.

There are three components to the Cancer Plan:

- Primary Prevention
- Early Detection
- Patient-Centered Services

Each section of the plan is organized with one over-arching goal, multiple SMART (see below) objectives and evidence-based strategies for each objective. With the exception of a few developmental objectives, a data source is identified to measure the outcomes of each objective, as well as baseline and target data.

An effective way to set objectives is to follow the acronym SMART.
A SMART *objective is:*

Specific
Measurable
Achievable
Realistic
Timely

A SMART *objective is more likely to be successful because it provides clear understanding on what needs to happen, how it will be measured, has great potential to be achieved because it is realistic in terms of time and resources available, and contains a deadline in which to complete the required action or activity.*

INTRODUCTION

Cancer is a complex group of diseases with no simple cause or cure. In Ohio and the United States, cancer is the second leading cause of death, accounting for about one in four deaths.[1] Cancer is addressed in Ohio through a broad range of prevention, early detection, treatment, survivorship and end-of-life services. This document was prepared by the Ohio Partners for Cancer Control (OPCC) with the vision of providing a roadmap to comprehensive cancer control for all Ohioans.

Ohio Partners for Cancer Control

OPCC is a statewide coalition dedicated to reducing the burden of cancer in Ohio. The coalition includes representatives of organizations and individual members who have cancer prevention and control as a focus of their mission. Organizations represented include hospitals, universities, cancer centers, health care professional associations, nonprofit organizations, government agencies, minority health coalitions, and community organizations. The OPCC's mission is to create "A Cancer-Free Future for All Ohioans" by stressing a unified fight against cancer through collaboration and use of a comprehensive approach. New members and fresh ideas are always welcome; the OPCC will achieve far greater success than could be accomplished by individual organizations working alone.

Plan Implementation

With support from the CDC, states, tribes, and territories throughout the nation are working to combat cancer through an integrated and coordinated approach to establish cancer control infrastructures, develop and implement comprehensive cancer control plans, mobilize coalitions, build partnership, collect and analyze cancer data, and evaluate cancer control activities.

The Ohio Comprehensive Cancer Control Program (OCCCP) is charged with formulating and upholding a consolidated vision for reducing our state's cancer burden. The OCCCP will lead the development and distribution of the Cancer Plan, promote the efforts of stakeholders and the OPCC, foster statewide communication and collaboration on cancer control issues, and publish evaluation results in order to prioritize cancer control strategies.

[1] American Cancer Society. *Cancer Facts & Figures 2014*. Atlanta: American Cancer Society; 2014.

While the OPCC provides the forum for coordination of Ohio's call to action, the individual partners are ultimately the driving force behind the achievement of the Cancer Plan's goals and objectives. The implementation of the Cancer Plan is the responsibility of all cancer control stakeholders. New partners are encouraged and needed. The OPCC seeks to be inclusive of all persons interested in prevention, early detection, treatment and follow-up care of cancer in the execution of the Cancer Plan. Only through collective action will Ohio succeed in reducing cancer incidence and mortality and improve the quality of life for cancer survivors.

To assist with plan implementation, the CDC recommends modeling comprehensive cancer control activities after evidence-based public health programs:

> *"Evidence-based interventions are programs that have been evaluated as effective in addressing a health-specific condition in the context of a particular ethnicity or culture. These programs identify the target populations that benefited from the program, the conditions under which the program works, and sometimes the change mechanisms that account for their effects. They use various tested strategies that target a disease or behavior. A defining characteristic of evidence-based interventions is their use of health theory in developing the content of the interventions and evaluations."*

Source: Fertman C and Allenworth D. 2010. *Health Promotion Programs from Theory to Practice*. Society for Public Health Education: Jossey-Bass, San Francisco.

To achieve the goals and objectives presented in the Cancer Plan, strategies, practices, interventions and/or programs grounded in evidence will need to be implemented. Below are some resources that provide examples and further information about using evidence-based programs

- Best Practices for Comprehensive Tobacco Control http://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm
- Cancer Control P.L.A.N.E.T http://cancercontrolplanet.cancer.gov/
- Cochrone Review www.cochrane.org/index.htm
- The Community Guide www.thecommunityguide.org/
- Prevention Research Centers www.cdc.gov/prc
- Research-Tested Intervention Programs http://rtips.cancer.gov/rtips/index.do
- U.S. Preventive Services Task Force (USPSTF) www.uspreventiveservicestaskforce.org

Evaluation

Program evaluation is the systematic collection of information about a programs processes, short-term impacts, and long-term outcomes in order to identify problems, determine if goals and objectives are met, guide program improvements, and build on successes. Both quantitative and qualitative methods must be used.

The OCCCP is responsible for developing and implementing an evaluation plan that will assess the Cancer Plan. The ultimate long-term measure of the Cancer Plan's success will be the reduction of cancer mortality rates in Ohio. However, since long-term outcomes take years to achieve, short-term impacts will be assessed through progress on measurable objectives in the Cancer Plan.

Quantitative data obtained from the Ohio Cancer Incidence Surveillance System (OCISS) at the Ohio Department of Health (ODH) will measure improvements in cancer incidence and stage at diagnosis. Data from the Office of Vital Statistics (VS) within ODH will be used to measure progress in reducing cancer mortality. For progress on objectives related to risk factors and screening, the Ohio Behavioral Risk Factor Surveillance System (BRFSS) and other quantitative data sources will be used. In addition, a statewide survey of OPCC stakeholders will be conducted each year by the OCCCP to collect quantitative and qualitative data on cancer control activities. All of the measurable objectives in the Cancer Plan will be followed in progress reports using the most reliable and recent data to assess cancer control progress, impacts and outcomes in Ohio.

While the OCCCP is responsible for evaluating the Cancer Plan, it is critical that stakeholders throughout Ohio also participate in monitoring progress and using data from available data sources to guide their cancer control activities. Challenges are expected during the implementation and evaluation of the Cancer Plan as a result of shifts in science, healthcare, the economy, the environment, funding opportunities and the political climates. Again, it is acknowledged that the Cancer Plan is a living document that will evolve with time, new information, varying resources, and changing needs.

Terms in Bold print in the objectives and strategies of the Cancer Plan are defined in the glossary.

THE CANCER BURDEN IN OHIO

Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. If the spread is not controlled, it can result in death.[2] While anyone can develop cancer, the risk increases with age. About 88 percent of all cancers were diagnosed among persons ages 50 and older in Ohio in 2012.[3] In the United States, about one half of all males and more than one-third of all females have a lifetime risk of developing some type of cancer in their lifetime.[3]

Cancer incidence data from the Ohio Cancer Incidence Surveillance System (OCISS) and cancer mortality data from VS indicate about 30,114 new invasive cancer cases and about 13,071 cancer deaths each year among Ohio males.[3] Cancer of the prostate is the leading site/type for incidence (23 percent of new cases) while cancer of the lung and bronchus is the leading site/type for death from cancer (31percent of cancer deaths).[3] These data are presented in Tables 1 and 2. (see appendix)

The OCISS and VS data for 2012 also indicate about 29,885 new invasive cancer cases and about 12,110 cancer deaths each year among Ohio females.[3] Breast cancer is the leading site/type for the incidence cases (21 percent of new cases) while cancer of the lung and bronchus is the leading site/type for cancer deaths (28 percent of cancer deaths).[3] These data are also presented in Tables 1 and 2.

Regular cancer screening by healthcare professionals, can result in the detection of cancers of the breast, cervix, colon and rectum, melanoma of the skin, oral cavity and pharynx, prostate, lung and bronchus, and testis at early stages, when treatment is more likely to be successful.[2] The five-year relative survival probability for all screenable cancers combined is about 86 percent, and even higher for selected sites/types.[2]

However, OCISS data for the 2012 indicate that about 73 percent of lung cancer cases and about 53 percent of all colon and rectum cancer cases are diagnosed late (regional or distant) stage, when survival is poorest. On a more positive note, about 87 percent of prostate cancer cases are diagnosed at the localized or regional stage, for which the five-year relative survival probability is nearly 100 percent. These data indicate that Ohio needs to continue to increase awareness of the advantages of screening and early detection to reduce mortality from screenable cancers.[3]

[2] *Cancer in Ohio 2014.* Ohio Cancer Incidence Surveillance System, Ohio Department of Health and The Ohio State University, Columbus, Ohio, March 2014.

[3] *Ohio Annual Cancer Report, 2015,* Ohio Department of Health, Office of Health Improvement and Wellness, Bureau of Health Promotion, Columbus, Ohio, May 2015.

Cancer Disparities

Significant disparities exist in cancer incidence rates by race/ethnicity. As shown in Table 3, the 2012 age-adjusted incidence rate for African Americans in Ohio (438.0 per 100,000) is 2 percent higher than the rate for whites (430.6 per 100,000) and is nearly double the rate for Asian/Pacific Islanders (253.7 per 100,000) for all cancer site/types combined.[3] The incidence rate for prostate cancer is 77 percent higher among African American males (157.2 per 100,000) compared to white males (89.0 per 100,000), and the incidence rate of multiple myeloma is more than twice as high among African Americans (10.4 per 100,000) compared to whites. Whites have a disproportionate burden of melanoma of the skin, with a 2012 incidence rate (20.0 per 100,000) that is 21 times higher compared to African Americans (0.9 per 100,000). Asian/Pacific Islanders in Ohio had lower incidence rates than other races for most cancer sites/types.[3]

Table 4 presents the number of cancer deaths and age-adjusted mortality rates for selected sites/types of cancer by race in Ohio for the year 2012.[3] The average annual mortality rate per 100,000 for all sites/types of cancer combined for African-Americans is 201.1 per 100,000 which is 11percent higher than the rate of 180.4 per 100,000 for whites. Blacks have higher mortality rates compared to whites for the following primary cancers: breast, cervix, colon and rectum, kidney and renal pelvis, larynx, liver and intrahepatic bile duct, lung and bronchus, multiple myeloma, pancreas, prostate, stomach, thyroid and uterus. The disparity for prostate cancer mortality is striking – the African-American male mortality rate is 38.3 per 100,000 which is 116 percent higher than rate of 17.7 for white Ohio males. Asian/Pacific Islanders had the lowest mortality rate for all cancer sites/types combined compared with both whites and blacks in 2012 (91.4 per 100,000); however, mortality rates of liver and intrahepatic bile duct cancer were highest among Asian/Pacific Islanders.[3] The reasons for these disparities are not clear but are likely due to multiple factors including access to screening and care, prevalence of risk factors, and the biology of the tumors. These data indicate that Ohio needs to continue to work to address these issues to achieve **health equity**.

OPCC is dedicated to identifying and addressing health disparities 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.

More detailed data regarding cancer incidence in Ohio can be found in, "Cancer in Ohio 2014," at http://www.healthy.ohio.gov/cancer/ocisshs/newrpts1.aspx and the Ohio Public Health Data Warehouse at http://publicapps.odh.ohio.gov/EDW/DataCatalog.

PRIMARY PREVENTION

Goal: Reduce the Incidence of Preventable Cancers

Primary prevention of cancer consists of actions taken by individuals, communities, institutions, and governments to protect against the occurrence of cancer. This includes promotion of measures that reduce the risk of developing cancer and empowering Ohioans to make informed decisions. This section of the Cancer Plan will focus on prevention strategies pertaining to tobacco use, exposure to environmental carcinogens, engaging in healthy lifestyle behaviors, the human papillomavirus vaccine and strategies related to cancer genetics.

In the last 50 years, **smoking** and exposure to **secondhand smoke** have caused more than 6.8 million cancers in the U.S.[4] Smoking increases the risk of dying from cancer and other diseases in cancer patients and survivors. The majority of Ohio homeowners are not aware of their risk of having elevated levels of radon in their homes, nor the cancer risk associated with exposure to **radon**. UV comes from the sun, tanning beds, and tanning lamps. Extended and/or unprotected exposure to UV radiation can lead to skin cancer, the most common cancer in the United States.

Vaccines help prevent certain types of infectious diseases. One of the most common sexually transmitted infectious diseases, human papillomavirus (HPV), causes cervical cancer. **Lifestyle behaviors** are a known risk factors for many chronic diseases, including several forms of cancer. About one-third of the most common forms of cancer in the United States can be prevented by engaging in regular physical activity, eating healthy foods, and obtaining and maintaining a healthy weight.[5] Knowledge gained from family history and **genetic testing** can play a role in cancer prevention and early detection. A detailed family history can help identify an inherited predisposition for cancer and can guide people to an appropriate referral for genetic counseling and testing.

[4]The Health Consequences of smoking - 50 years of Progress: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services. Center for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion. Office of Smoking and Health, 2014.

[5] Ohio Behavioral Risk Factor Surveillance System, Ohio Department of Health, 2013. Cancer in Ohio, 2014.

Tobacco Use

OBJECTIVE 1: By December 31, 2020, increase the percentage of Ohio cigarette smokers who report attempting to quit smoking for one day or longer during the previous 12 months.

Data Source	Baseline (2013)	Target
Behavioral Risk factor Surveillance System	59.5%	75%

STRATEGIES

- Promote use of the Ohio Tobacco Quit Line by healthcare providers.
- Market the Ohio Tobacco Collaborative as a viable means of offering telephonic tobacco cessation services and promote and encourage utilization of the Ohio Tobacco quit line on the part of member participants.
- Provide education to healthcare providers to identify and intervene with tobacco-using clients.
- Provide educational materials and self-help guides to clients at medical appointments.
- Reduce client out-of-pocket cost for cessation therapies.
- Encourage healthcare providers in all Ohio counties to offer tobacco cessation resources.
- Increase the number of health plans and employers that are covering tobacco cessation treatment consistent with guidance set forth in the Frequently Asked Questions (FAQ) released by the US Department of Labor in May 2014, http://www.dol.gov/ebsa/faqs/faq-aca19.html.
- Promote 1-800-QUIT-NOW by delivering evidence-based, strategic, culturally appropriate, high-impact messages.
- Launch a mass media campaign to refer Ohioans to the Ohio Tobacco Quit Line or other cessation services.

The 2014 Surgeon General's Report titled, "The Health Consequences of Smoking – 50 years of Progress", reported that smoking causes cancer in nearly every organ of the body. Quitting smoking improves cancer survival.

OBJECTIVE 2: By December 31, 2020, increase the excise tax on other tobacco products such as snus, snuff, chewing tobacco and e-cigarettes.

Data Source	Baseline (Eff. 9/29/2013)	Target
Ohio Revised Code Section 5743.63	17%	37%

STRATEGIES

- Collaborate with advocates (e.g., American Heart Association, American Lung Association, and American Cancer Society Cancer Action Network) to enact favorable tobacco control policies.
- Support legislature and advocates by providing accurate, timely surveillance and evaluation data.
- Advocate for a portion of resulting tax revenue to be dedicated to fund cessation services and general tobacco use prevention and control activities.

Federal, state and local efforts to increase tobacco product excise taxes are an effective public health intervention to promote tobacco use cessation and reduce the initiation of tobacco among adults.

—Best Practices for Comprehensive Tobacco Control Programs, 2014

Exposure to Environmental Carcinogens

OBJECTIVE 3: By December 31, 2020, increase the number of Ohio school districts with **100 percent tobacco-free policies.**

Data Source	Baseline	Target
ODH Tobacco-Free School Database	36	65

STRATEGIES

- Redesign the ODH Tobacco-Free Schools toolkit and promote the release of the new toolkit.
- Provide technical assistance and resources to school districts to guide the process from implementation to enforcement and to strengthen existing policies.
- Update the ODH Tobacco-Free Schools Database and share policy adoption progress with stakeholders.
- Develop and implement a statewide tobacco-free schools recognition program, based on the highly-recognized state report card for Ohio schools.
- Partner with local coalitions, community organizations and local health districts to promote the adoption of 100 percent tobacco-free policies in their local school districts.
- Educate Ohio school districts and communities about the benefits of implementing 100 percent tobacco free school policies.
- Attend Parent Teacher Association/Parent Teacher Organization meetings to discuss and promote 100 percent tobacco-free polices.
- Conduct a letter writing campaign to school boards in support of 100 percent tobacco-free schools.
- Promote school districts that adopt 100 percent tobacco free school policies.
- Provide free resources, such as signage and banners, to school districts that adopt 100 percent tobacco-free School policy.

It has been demonstrated that comprehensive tobacco-free school policies, combined with other efforts, are effective in reducing the prevalence of tobacco use among youths.

OBJECTIVE 4: By December 31, 2020, increase the number of colleges and universities with 100 percent tobacco-free policies.

Data Source	Baseline	Target
ODH Tobacco-Free University Database	17	25

STRATEGIES

- Finalize and promote the tobacco-free college campus model policy.
- Participate in quarterly calls of the Tobacco-Free College and University Stakeholders groups.
- Update the ODH Tobacco-Free University Database and share policy adoption progress with stakeholders.
- Provide technical assistance and resources to school districts to guide the process from implementation to enforcement and to strengthen existing policies.
- Partner with coalitions, community organizations and local health districts to promote the adoption of 100 percent tobacco-free campus policies in their areas.
- Provide university and college administrators (decision-makers) with information about secondhand smoke and tobacco-free policies on other campuses.
- Meet with the appropriate administrators about enacting a tobacco-free policy.
- Generate campus support by engaging strong student and faculty supporters to join the tobacco-free campaign.
- Use social networking to advance the tobacco-free campaign and gain support.
- Obtain written endorsements for 100 percent tobacco-free campus policies from student governments, student organizations, and faculty groups.
- Provide free resources such as signage and banners to schools implementing 100 percent tobacco-free policies.
- Promote colleges and universities which adopt a 100 percent tobacco-free campus policy.

OBJECTIVE 5: By December 31, 2020, increase the percentage of public multi-unit housing complexes in Ohio with 100 percent smoke-free policies.

Data Source	Baseline	Target
ODH Smoke-Free Multi-Unit Housing Database	39%	50%

STRATEGIES

- Identify and recruit partners to collaborate on the creation of customized smoke-free multi-unit webinars that present local data and the need for 100 percent smoke-free policies.
- Conduct outreach to housing authorities in high need areas to move through stages of change with regard to policy adoption/implementation.
- Develop, disseminate and promote model laws and policies for smoke-free multi-unit housing complexes.
- Develop and disseminate resources (e.g., media materials) for stakeholders working on smoke-free multi-unit policies.
- Participate in the ODH **Smoke-free Housing Workgroup.**
- Provide funding to local communities that support efforts to make multi-unit housing smoke free.
- Attending multi-unit housing meetings to discuss the benefits of smoke-free policy with residents and provide educational materials.
- Provide access to free smoking cessation classes and therapies for resident.
- Partner with coalitions, local health districts and community organizations to promote smoke-free policies in public housing.
- Promote housing districts that adopt smoke-free policies.
- Seek out a spokesperson from a smoke-free public housing authority to champion the cause among other public housing authorities.

Nationally, more than one in three people who live in rental housing are exposed to secondhand smoke, 80 percent of which can't be seen or smelled.

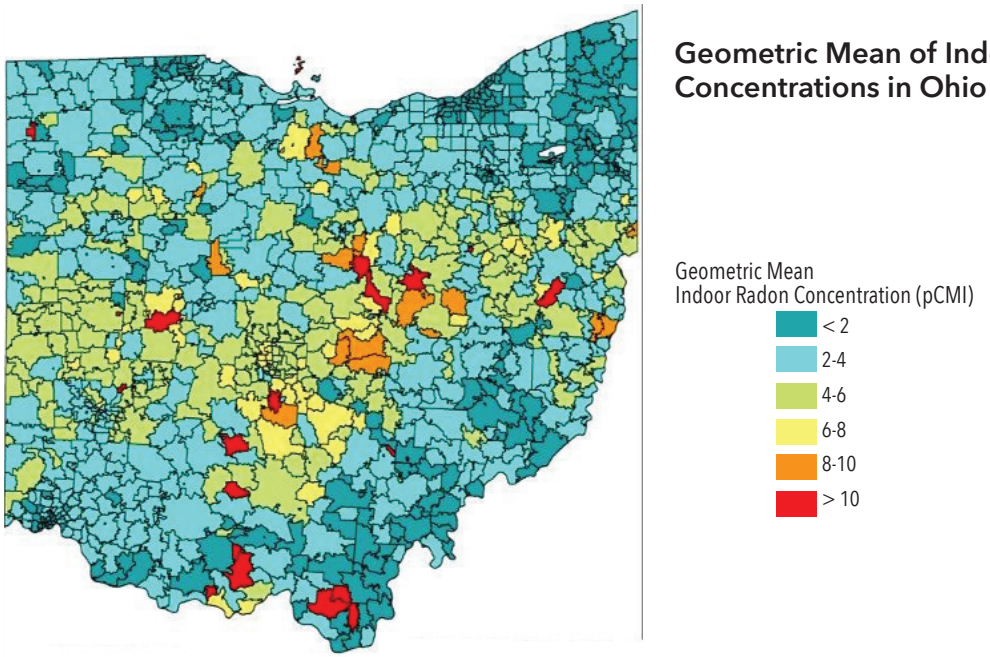
—Surgeon General Report on the Health Consequences of Smoking, 2014

OBJECTIVE 6: By December 31, 2020, increase the number of radon mitigation systems installed in Ohio homes.

Data Source	Baseline	Target
Ohio Radon Information System Database	33,495	60,855

STRATEGIES

- Identify high risk areas in Ohio to focus outreach activities.
- Educate the public about radon, radon testing, radon mitigation and the risk of lung cancer.
- Encourage home buyers and sellers to hire Ohio licensed radon professionals for radon testing and mitigation.
- Educate realtors, building code officials, medical professionals, and housing and legislative authorities about radon, the risk of lung cancer and their role in reducing radon exposure.
- Support legislation for building codes that align with the Radon Control Methods section (Appendix F) of the International Building Code.
- Reduce out-of-pocket costs associated with radon testing and mitigation.



Radon is an odorless, cancer-causing radioactive gas, and the second leading cause of lung cancer in the United States. Radon Mitigation is the process of fixing a problem of high radon levels in a home.

Vaccines Shown to Reduce the Risk of Cancer

OBJECTIVE 7: By December 31, 2020, increase the percentage of adolescents aged 13-17 years who have received three doses of the human papillomavirus (HPV) vaccine.

Data Source		Baseline (2013)	Target
National Immunization Survey	Females	35%	50%
National Immunization Survey	Males	14.7%	30%

STRATEGIES

- Educate parents, community members and healthcare providers about the HPV vaccine.
- Support public awareness campaigns targeted to parents, adolescents and populations most at risk for HPV infection regarding the link between HPV and cancer.
- Partner with local organizations to increase outreach and education efforts targeting community awareness of the benefits of HPV vaccination.
- Educate providers about current American Committee on Immunization Practices (ACIP) recommendations regarding HPV vaccination to improve health professional knowledge, practice behaviors and system support.
- Implement office-based reminder/recall systems to increase the number of patients who complete the HPV vaccination series.
- Support school-based clinics that offer the HPV vaccine.
- Train community health outreach workers to deliver consistent HPV messaging one-on–one or through group education to the community.
- Develop culturally sensitive educational materials on HPV prevention.

HPV vaccine uptake has not kept pace with that of other adolescent vaccines. In 2013,more than one-third of 13-17 year old girls and less than one in five 13-17 year old boys received all three doses of the vaccine.

Exposure to UV from the Sun and Sun Lamps

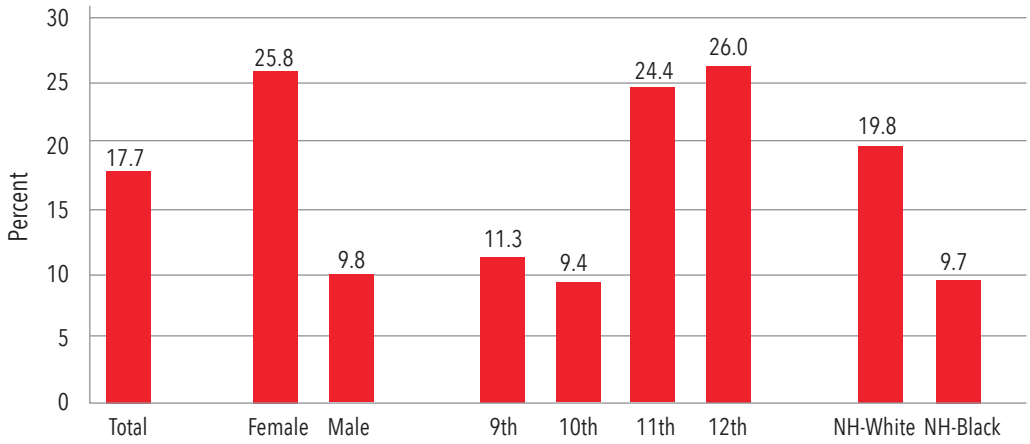
OBJECTIVE 8: Reduce the percentage of youth (grades 9-12) who have used a tanning booth, sunlamp or sunbed in the past 12 months.

Data Source	Baseline (2013)	Target
Youth Risk Behavior Survey	17.7%	15%

STRATEGIES

- Support legislation for restrictions on tanning bed use by youth under age 18.
- Promote educational initiatives that emphasize decreased exposure to UV light, including natural sun, for all ages, including initiatives that target children, adolescents, parents and healthcare providers.
- Promote the use of UV protection outdoors, such as sunscreen and protective clothing, among persons of all ages.
- Conduct a statewide awareness campaign on recognizing the early signs and symptoms of skin cancer.

Percentage of students who used an indoor tanning device such as a sunlamp, sunbed or tanning booth one or more times during the past 12 months in Ohio 2013



In 2014 Ohio passed a law requiring parental permission for minors to use tanning beds. Parents are required to sign a consent form in the presence of a salon operator or employee for a 16- or 17-year-old to tan that is valid for 90 days. Parents of children under 16 must sign the form before each tanning session and they must be present for tanning sessions.

Source: Youth Risk Behavior Survey, 2013

Physical Activity

OBJECTIVE 9: By December 31, 2020, increase the percentage of Ohio adults who meet the 2008 Physical Activity Guidelines for Americans.

Data Source	Baseline (2013)	Target
Behavioral Risk Factor Surveillance System	19.0%	25.0%

OBJECTIVE 10: By December 31, 2020, increase the percentage of Ohio high school students (grades 9-12) engaging in 60+ minutes of daily physical activity.

Data Source	Baseline (2013)	Target
Youth Risk Behavior Survey	25.9%	28.0%

STRATEGIES

- Develop shared-use policies and agreements between schools, communities, parks and recreation and other groups to increase physical activity opportunities in the community.
- Increase the number of worksites that incorporate policies, standards, practices and/or directives in their wellness programs that provide opportunities for physical activity.
- Develop a social marketing campaign that emphasizes the benefits of sustained physical activity.
- Support zoning for mixed-use development.
- Support the adoption of **Complete Streets** policies.
- Advocate for bike and pedestrian infrastructure changes that support physical activity.
- Advocate for the adoption of master transportation plans that include bike and pedestrian priorities.

The 2008 Physical Activity Guidelines for Americans (http://www.health.gov/paguidelines/) recommends 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity aerobic physical activity a week for adults, and 60 minutes or more of aerobic physical activity every day (at three days of which should be vigorous intensity) for children and adolescents. Muscle and bone strengthening activities should be done at least two times a week for adults and three times a week for youth.

Nutrition

OBJECTIVE 11: By December 31, 2020, increase the percent of Ohio adults who consume five or more servings of fruits and vegetables per day.

Data Source	Baseline (2013)	Target
Behavioral Risk Factor Surveillance System	TBD	Increase by 5%

OBJECTIVE 12: By December 31, 2020, increase the percent of Ohio high school students (grades 9-12) who consume fruits and vegetables five or more times per day during the past seven days.

Data Source	Baseline (2013)	Target
Youth Risk Behavior Survey	19.3%	25.0%

STRATEGIES

- Increase the number of healthy retail options in high-need communities and promotion of these healthy food options by implementing healthy retail initiatives, such as **Good Food Here.**
- Increase the number of worksites that include policies, standards, practices and/or directives in their wellness programs that promote healthy eating, e.g., healthy vending and availability of high-quality fruits and vegetables in cafeterias.
- Support increased access to affordable fruits and vegetables by promoting farmers' markets who accept Supplemental Nutrition Assistance Program (SNAP) and Women, Infants and Children Farmers Market Nutrition Program (WIC FMNP).
- Develop a social marketing campaign that emphasizes the benefits of healthy foods and beverages.
- Increase the purchasing of local foods from Ohio sources including farm to institution and farm to school.

Fresh fruits and vegetables are low in calories and high in many vitamins, minerals, fiber and antioxidants. Consuming a diet high in fruits and vegetables has been linked to the prevention of certain cancers.

Obesity

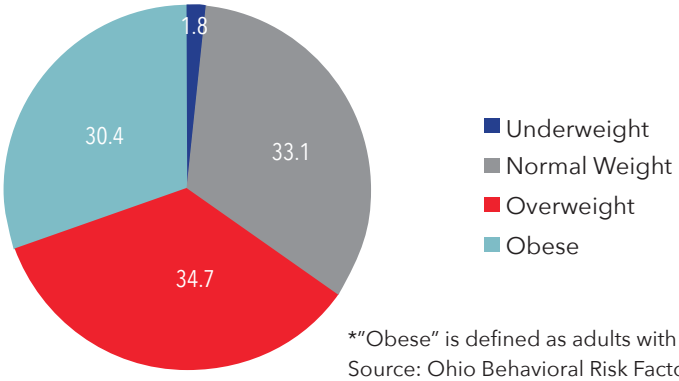
OBJECTIVE 13: By December 31, 2020, increase the percentage of Ohio adults with a healthy weight (Body Mass Index (**BMI**) of 18.5-24.9).

Data Source	Baseline (2013)	Target
Behavioral Risk Factor Surveillance System	33.1%	34.8%

OBJECTIVE 14: By December 31, 2020, increase the percentage of Ohio high school students (grades 9-12) with a healthy weight (**BMI** 18.5-24.9).

Data Source	Baseline (2013)	Target
Youth Risk Behavior Survey	71.1%	76%

Percent of Overweight and Obesity* (BMI) Among Adults 18 and Older in Ohio, 2013



*"Obese" is defined as adults with a BMI of 30.0 or more.
Source: Ohio Behavioral Risk Factors Surveillance System, 2013.

STRATEGIES

- Provide evidence-based worksite programs for weight loss.
- Implement technology-supported coaching or counseling interventions to help with weight loss and maintenance.
- Promote awareness about the connection between cancer risk/prevention and nutrition, physical activity and obesity for all ages.
- Support third-party reimbursement for primary care treatment of overweight/obesity by medical providers, registered dietitians and other qualified health-care 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.
- Implement interventions to reduce screen time, e.g., computer, television, video and computer gaming.
- Promote the adoption of the CDC's National Healthy Worksite Program standards in Ohio worksite health programs.
- Promote membership in the regional Healthy Ohio Business Councils.

If Ohioans reduce their BMI by just five percent, 23,000 cases of cancer will be prevented in Ohio by 2030, saving $1 billion.

—Trust for America's Health F as in Fat Report for Ohio.

http://healthyamericans.org.reports/obesity2012

Cancer Genetics

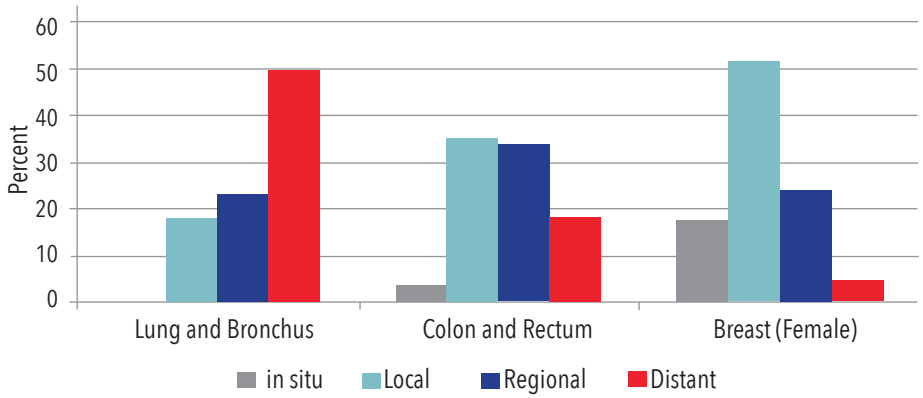
OBJECTIVE 15: By December 31, 2020, increase the overall number of individuals who receive Ohio Cancer Genetics Network (OCGN) Cancer Risk Assessment services.

Data Source	Baseline (Year)	Target
Ohio Cancer Risk Assessment Survey (OCRAS)	4,590	5,508

STRATEGIES

- Conduct healthcare provider education events with targeted physician specialist groups regarding established referral guidelines, e.g., National Comprehensive Cancer Network, American Congress of Obstetricians and Gynecologists, National Comprehensive Cancer Network for cancer risk assessment.
- Develop and disseminate promotional materials to increase awareness about cancer risk assessment services including methods to locate local programs.
- Update the *Cancer Genetics in Your Practice* webinar series and post to the ODH website.
- Create a map on the ODH website that contains links to all the Ohio Cancer Genetics Risk Assessment sites, their outreach locations, and the clinical/education services provided.
- Promote collaboration between cancer genetic counselors and hospital registries to identify patients and families appropriate for genetic counseling.

Stage at Diagnosis for Selected Cancer Sites/Types in Ohio, 2012



Source: Ohio Behavioral Risk Factors Surveillance System, 2015.

Summary staging is used for descriptive and statistical analysis of tumor registry data:

in situ – Noninvasive cancer that has not penetrated surrounding tissue.

Local – A malignant tumor confined entirely to the organ of origin.

Regional – A malignant tumor that has extended beyond the organ of origin directly into surrounding organs or tissues or into regional lymph nodes.

Distant – A malignant tumor that has spread to parts of the body (distant organs, tissues and/or lymph nodes) remote from the primary tumor.

Unstaged/Missing – Insufficient information is available to determine the stage or extent of the disease at diagnosis (not shown).

EARLY DETECTION

Goal: Identify Cancer at the Earliest Possible Stage

There are reliable and accepted early detection screenings for **breast**, **cervical**, **colorectal**, **oral**, and **lung cancers**. These screenings are conducted in order to find precancerous and cancerous abnormalities prior to the onset of symptoms. By following screening guidelines, cancer can be detected at the earliest stages, increasing available treatment options and survival rates and reducing mortality rates. Additionally, for colorectal and cervical cancers, early detection screenings can find changes prior to cancer developing and prevent the potential progression to cancer.

With the onset of the Affordable Care Act, most preventive screenings are currently covered by health insurance providers at no cost. Further, programs such as the Ohio Breast and Cervical Cancer Project (BCCP) and Susan G. Komen provide additional screening funds and activities to increase the rate of early detection screenings. Even with these changes, disparities remain in various populations with lower screening rates and higher late stage diagnosis and mortality rates.

Breast Cancer

OBJECTIVE 1: By December 31, 2020, increase the percentage of women age 50-74 who have received breast cancer screening in the past two years based on the most recent guidelines set forth by the United States Preventive Services Task Force USPSTF.

Data Source	Baseline (2012)	Target
Behavioral Risk Factor Surveillance System	81.9%	90.1%

OBJECTIVE 2: By December 31, 2020, reduce the rate* of female breast cancer identified at late stages.

Data Source	Baseline (2011)	Target
Ohio Cancer Incidence Surveillance System	43.1	40.9

*Rate per 100,000 population – age adjusted to the year 2000 standard population.

STRATEGIES

- Partner with community-based organizations and businesses to promote breast cancer screenings (e.g., faith based, beauty salons, libraries, local women's groups).
- Develop and implement media plans (e.g., small media, social media) that engage partners, providers and the general public, and promote evidence-based/tested messages.
- Work with community partners to provide group education sessions with the goal of informing, encouraging and motivating participants to seek recommended screening.
- Work with **community health workers** (CHW), **patient navigators** and other partners to provide one-on-one education about indications for and the benefits of cancer screening, as well as overcoming barriers to screening.
- Work with partners, community organizations and businesses to implement policies to reduce client out-of-pocket costs and structural barriers to screening (e.g., mobile mammography vans, transportation, and childcare.)
- Develop and distribute community resource guides to assist in reducing client out-of-pocket costs.
- Work with clinical service providers to promote use of provider reminder/recall systems.
- Develop and implement a quality improvement process for healthcare providers that incorporates evaluation of cancer screening practices and feedback to improve screening rates.
- Provide professional development/education to promote screening guidelines.
- Advocate for the funding of the state breast and cervical cancer screening program for low-income, uninsured women.
- Promote the Ohio Income Tax donation check-off for the BCCP.

According to Cancer in Ohio 2014, 67 percent of breast cancers are diagnosed at an early stage (in situ or localized), for which the five year survival rate is 99 percent.

Cervical Cancer

OBJECTIVE 3: By December 31, 2020, increase the percentage of women aged 21-65 years who receive a cervical cancer screening based on the most recent guidelines according to the USPSTF.

Data Source	Baseline (2012)	Target
Behavioral Risk Factor Surveillance System	83.0%	91.3%

OBJECTIVE 4: By December 31, 2020, reduce the rate* of invasive cervical cancer.

Data Source	Baseline (2012)	Target
Ohio Cancer Incidence Surveillance System	6.5	7.1

STRATEGIES

- Develop and implement a small media plan (e.g., videos and printed materials such as letters, brochures, and newsletters) to promote evidence-based/tested messages to healthcare providers and women.
- Work with **CHWs**, **patient navigators** and other partners to provide one-on-one education about indications for and benefits of cancer screening, as well as overcoming barriers to screening.
- Work with clinical service providers to promote use of provider reminder/recall systems.
- Develop and implement a quality improvement process for health care providers that incorporates the evaluation of cancer screening practices and feedback to improve screening rates.
- Provide professional development/education to promote screening guidelines.

Hispanic women have more than twice the risk of developing cervical cancer compared to non-Hispanic white women, and African American women have 1.5 times the risk of non-Hispanic white women.

*Rate per 100,000 population – age adjusted to the year 2000 standard population.

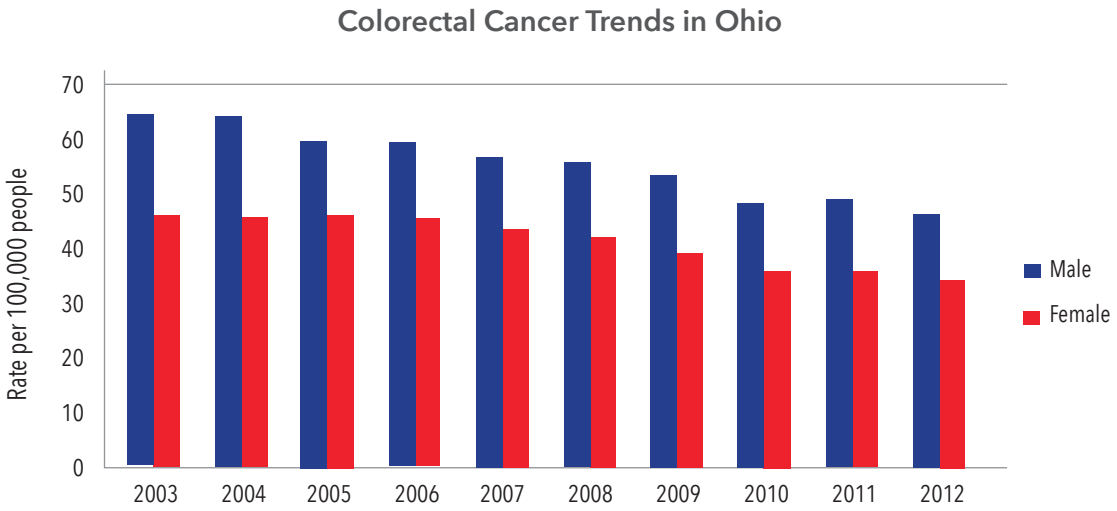
Colorectal Cancer:

OBJECTIVE 5: By December 31, 2018, increase the percentage of adults aged 50-75 years who receive a colorectal cancer screening based on the most recent guidelines (blood stool test in the past year, sigmoidoscopy in the past five years plus a fecal occult blood test in past three years, or a colonoscopy in the past 10 years).

Data Source	Baseline (2012)	Target
Behavioral Risk Factor Surveillance System	63.5%	80%

OBJECTIVE 6: By 2020, reduce the rate* of invasive colorectal cancer.

Data Source	Baseline (2012)	Target
Ohio Cancer Incidence Surveillance System	39.8	38.7



*Rate per 100,000 population – age adjusted to the year 2000 standard population.

STRATEGIES

- Create a multi-stakeholder taskforce to implement the **National Colorectal Cancer Roundtable 80 percent by 2018 strategic plan**.
- Work with statewide organizations (e.g., Ohio Academy of Family Physicians, Ohio Association of Community Health Centers) to develop and distribute healthcare provider tools and resources for increasing colorectal cancer screening rates.
- Work with clinical service providers to promote the use of provider reminder/recall systems.
- Include reminders for cancer screening in electronic health record systems.
- Educate patients about the benefits of cancer screening and ways to overcome barriers to getting screened.
- Develop and implement a quality improvement process for health care providers that incorporates the evaluation of cancer screening practices and feedback to improve screening rates.
- Use small media (e.g., videos, letters, brochures, and newsletters) and earned media (e.g., free media, letters to the editor, appearances on local news programs and on-air or print interviews) to build public awareness and demand for cancer screening.
- Remove structural barriers (e.g., transportation, restrictive appointment hours, limited access to screening sites, complicated administrative processes) to cancer screening.

Colorectal cancer screening can detect cancer, polyps or abnormal cell growth, which can develop into colorectal cancer. Finding and removing polyps or other areas of abnormal cell growth may be one of the most effective ways to prevent colorectal cancer development.

Lung Cancer

OBJECTIVE 7: By December 31, 2017, create a plan to increase availability of high quality low-dose computed tomography (low-dose CT) lung cancer screening for at-risk Ohioans.

Data Source	Baseline	Target
Completed Plan	0	1

STRATEGIES

- Conduct a comprehensive environmental scan to assess the availability and accessibility of low dose CT lung cancer screening services in Ohio.
- Engage stakeholders in identifying gaps in lung cancer screening.
- Establish a work group to develop plan guidelines and expectations.
- Identify appropriate evidence-based interventions to increase availability and access to lung cancer screenings.

In December 2013, the United States Preventive Services Task Force recommended annual screening for lung cancer with high quality low-dose computed tomography (LDCT) in adults aged 55 to 80 years who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.

PATIENT-CENTERED SERVICES

Goal: Improve the Lives for Persons Diagnosed with Cancer and their Support Systems

Patient centered services are defined as: specialized care for people with a cancer diagnosis that focuses on improving quality of life for those persons and their support system; services that are provided by a multidisciplinary healthcare team who work together with a patient's oncologist to provide comprehensive support and care. Patients are provided individualized care in conjunction with curative treatment. These services that focus on four main developmental objectives: **survivorship**, **palliative care, end of life care**, and **clinical trials/research**.

A person becomes a **cancer survivor** when he or she is first diagnosed with the condition. Cancer survivors in all stages of survivorship face various needs related to their diagnosis, whether they are physical, mental, emotional or financial. The period at the end of life is different for each person. The signs and symptoms people have vary as their illnesses continues, and each person has unique needs for information and support.

There are 14.5 million cancer survivors in the US. By 2024, it is estimated that the population of cancer survivors will increase to almost 19 million.

—American Cancer Society

Survivorship

OBJECTIVE 1: By December 31, 2020, conduct two statewide assessments to determine rates in delivery of **Patient-Centered Services** according to the **American College of Surgeons Commission on Cancer (CoC) National Standards of Care.**

Data Source	Baseline	Target
Patient-Centered Services Assessment	0	2

STRATEGIES

- Develop an assessment tool to determine which American College of Surgeons National Standards of Care protocols specific to patient-centered services are in place within CoC accredited hospitals in Ohio.
- Analyze data collected from the statewide assessment to identify strengths and gaps in patient-centered services and establish baseline data for future survivorship initiatives by April 30, 2016.
- Administer second assessment to evaluate outcomes.

OBJECTIVE 2: By December 31, 2020, improve the rates of delivery of patient-centered services throughout Ohio in accordance with the American College of Surgeons National Standards of Care.

Data Source	Baseline	Target
Patient-Centered Services Assessment	TBD	Increase by 5%

STRATEGIES

- Use data obtained from the patient-centered services assessment to determine baselines.
- Develop and implement education programs to increase healthcare provider knowledge regarding patient-centered services.
- Develop and distribute culturally appropriate educational materials to targeted audiences regarding resources available for accessing patient-centered services.

- Participate in the development of legislation to mandate third party reimbursement for patient-centered services.
- Advocate for increased federal and state funding of patient-centered clinics, programs and services.
- Advocate for health insurance policies that ensure adherence to recommendations for quality care and timeliness for treatment and follow-up care.

OBJECTIVE 3: By December 31, 2020, increase access to survivorship programs and community resources by all persons diagnosed with cancer and their support teams.

Data Source	Baseline	Target
Patient-Centered Services Assessment	TBD	Increase by 5%

STRATEGIES

- Use data obtained from the patient-centered services assessment to determine baseline.
- Develop and distribute community resource guides for cancer survivors and their support systems.
- Develop and implement a quality improvement process for healthcare providers that incorporates the evaluation of referral protocols and comprehensive care plans, provides feedback to standardize referral practices and increases the use of care plans.
- Provide professional development/education for healthcare providers on standardized referral protocols and comprehensive cancer care plans.
- Provide training to worksite wellness coordinators, leaders in cancer survivorship services, and other stakeholder organizations on evidence-based survivorship programs.

End-of-Life Care: Hospice and Palliative Care

OBJECTIVE 4: By December 31, 2020, increase the number of health care professionals certified in hospice and palliative medicine.

Data Source	Healthcare Professions	Baseline (2014)	Target
American Board of Medical Specialties	Physicians	266	320
The National Board for Certification of Hospice and Palliative Nurses	Nurses	1,365	1,638
National Association of Social Workers	Social Workers	51	61

OBJECTIVE 5: By December 31, 2020, increase hospice admission rates to improve access to end-of-life care.

Data Source	Baseline	Target
Medicare Report on Hospice Admissions	TDB	1.5% Above Baseline

STRATEGIES

- Partner with **hospice care facilities, alliances and organzations** to support efforts to increase identification and enrollment of qualified patients into hospice programs.
- Provide professional development/education for healthcare providers, community health workers and social workers regarding end-of-life care and hospice referrals.
- Advocate for third-party reimbursement for palliative, hospice and end-of-life care.
- Provide healthcare providers with timely updates on changes regarding palliative care, hospice and end-of-life care in state and federal legislation and funding.
- Recruit stakeholders from the **National Palliative Care Registry, Center for Advance Palliative Care,** and **National Palliative Care Research Center** to join the OPCC.
- Survey pediatric providers to determine baseline served by diagnoses by July 1, 2016.
- Determine baseline Medicare and Medicaid Hospice admissions by December 31, 2015.

Clinical Trials and Research

OBJECTIVE 6: By December 31, 2018, increase awareness of and participation in cancer clinical trials and research.

Data Source	Baseline (2014)	Target
Behavioral Risk Factor Surveillance System	TBD	Increase by 10%

STRATEGIES

- Include the cancer survivorship module questions in Ohio 2018 BRFSS.
- Advocate for increased funding of cancer research.
- Educate medical professionals regarding the importance of recommending clinical trials.
- Provide patient navigation training on identifying and referring patients to available clinical trials.
- Promote web-based resources for identifying current clinical research trials (e.g., National Cancer Institute, Ohio Clinical Trials Collaborative).

Clinical trials are essential for moving new methods of preventing, diagnosing, and treating cancer from the laboratory to physicians' offices and other clinical settings.

—The National Cancer Institute

Appendix A-1

Table 1 - Number of New Invasive Cancer Cases and Age-Adjusted Incidence Rates by Cancer Site/Type and Sex in Ohio 2012[1,2]

Primary Cancer Site/Type	Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate
All Sites/Types	**30,114**	**483.1**	**29,885**	**410.3**	**59,999**	**439.1**
Bladder	2,292	38.4	695	8.9	2,987	21.6
Brain and Other CNS	479	8.0	346	5.1	825	6.5
Breast	104	1.7	8,642	120.3	8,746	65.1
Cervix	NA	NA	401	6.5	401	6.5
Colon and Rectum	2,833	46.3	2,622	34.5	5,455	39.8
Esophagus	557	8.8	160	2.1	717	5.1
Hodgkins Lymphoma	167	3.0	127	2.1	294	2.5
Kidney and Renal Pelvis	1,289	20.7	832	11.5	2,121	15.7
Larynx	381	5.9	126	1.6	507	3.6
Leukemia	852	14.3	625	8.7	1,477	11.1
Liver and Intrahepatic Bile Duct	656	9.7	275	3.6	931	6.4
Lung and Bronchus	4,978	80.5	4,314	56.9	9,292	66.9
Melanoma of Skin	1,399	23.2	1,076	16.4	2,475	19.1
Multiple Myeloma	380	6.2	349	4.6	729	5.3
Non-Hodgkin Lymphoma	1,323	21.9	1,119	15.0	2,442	18.0
Oral Cavity and Pharynx	1,097	16.8	427	5.7	1,524	10.9
Ovary	NA	NA	822	11.4	822	11.4
Pancreas	882	14.3	851	10.8	1,733	12.4
Prostate	6,877	103.7	NA	NA	6,877	103.7
Stomach	552	8.9	321	4.2	873	6.3
Testis	287	5.4	NA	NA	287	5.4
Thyroid	371	6.1	1,306	21.1	1,677	13.8
Uterus	NA	NA	2,030	26.9	2,030	26.9

[1]Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2015.

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

NA = Not Applicable
CNS = Central Nervous System

Appendix A-2

Table 2 - Number of Cancer Deaths and Age-Adjusted Mortality Rates by Cancer Site/Type and Sex in Ohio 2012[1,2,3]

Primary Cancer Site/Type	Male		Female		Total	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
All Sites/Types	**13,071**	**219.1**	**12,110**	**155.5**	**25,246**	**182.0**
Bladder	475	8.4	200	2.4	677	4.8
Brain and Other CNS	362	5.9	243	3.4	606	4.5
Breast	16	0.3	1,736	22.6	1,755	12.7
Cervix	NA	NA	161	2.4	161	2.4
Colon and Rectum	1,194	20.1	1,046	13.0	2,244	16.1
Esophagus	580	9.4	141	1.8	724	5.2
Hodgkin's Lymphoma	25	0.4	20	0.3	45	0.3
Kidney and Renal Pelvis	316	5.2	221	2.8	539	3.9
Larynx	143	2.3	41	0.6	185	1.3
Leukemia	550	9.6	393	5.0	952	7.0
Liver and Intrahepatic Bile Duct	558	8.6	264	3.4	825	5.7
Lung and Bronchus	4,070	67.1	3,427	44.4	7,512	54.1
Melanoma of Skin	242	4.1	157	2.1	401	2.9
Multiple Myeloma	252	4.3	251	3.2	504	3.6
Non-Hodgkin Lymphoma	476	8.3	390	5.0	870	6.4
Oral Cavity and Pharynx	244	3.9	109	1.4	353	2.5
Ovary	NA	NA	597	7.8	597	7.8
Pancreas	859	14.0	791	10.0	1,653	11.8
Prostate	1,066	19.2	NA	NA	1,066	19.2
Stomach	207	3.4	143	1.8	350	2.5
Testis	16	0.3	NA	NA	16	0.3
Thyroid	23	0.4	39	0.5	63	0.5
Uterus	NA	NA	384	4.9	384	4.9

[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.

[3]Total deaths listed above include those of unknown sex

NA = Not Applicable

CNS = Central Nervous System

Appendix A-3

Table 3 - Number of New Invasive Cancer Cases and Age-Adjusted Incidence Rates by Cancer Site/Type and Race in Ohio 2012[1,2]

Primary Cancer Site/Type	White		Black		Asian/Pacific Islander	
	Cases	Rate	Cases	Rate	Cases	Rate
All Sites/Types	**52,010**	**430.6**	**6,024**	**438.7**	**428**	**253.7**
Bladder	2,697	21.8	178	13.7	4	*
Brain and Other CNS	759	6.8	46	3.3	6	2.7
Breast	7,595	64.0	952	69.3	106	56.4
Cervix	347	6.6	37	5.0	3	*
Colon and Rectum	4,781	39.2	547	40.8	38	23.6
Esophagus	662	5.3	49	3.5	2	*
Hodgkins Lymphoma	248	2.5	35	2.4	5	2.7
Kidney and Renal Pelvis	1,852	15.5	246	17.8	6	3.1
Larynx	440	3.5	62	4.2	1	*
Leukemia	1,295	11.1	134	9.6	16	8.3
Liver and Intrahepatic Bile Duct	730	5.7	171	11.2	11	7.6
Lung and Bronchus	8,243	66.6	949	70.9	42	30.8
Melanoma of Skin	2,263	20.0	12	0.9	1	*
Multiple Myeloma	575	4.7	140	10.4	1	*
Non-Hodgkin Lymphoma	2,198	18.3	168	12.1	25	15.8
Oral Cavity and Pharynx	1,380	11.2	115	8.1	7	3.9
Ovary	743	11.7	59	7.7	12	12.8
Pancreas	1,514	12.2	196	14.8	11	8.1
Prostate	5,291	89.0	969	157.2	45	63.7
Stomach	707	5.7	143	11.1	10	6.9
Testis	273	6.1	7	1.1	1	*
Thyroid	1,452	13.8	150	11.0	30	12.5
Uterus	1,803	27.3	174	22.1	13	11.8

[1]Source: Ohio Cancer Incidence Surveillance System, Ohio Department of Health, 2015.

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

* Rates are suppressed when the total count is less than five.

CNS = Central Nervous System

Appendix A-4

Table 4 - Number of Cancer Deaths and Age-Adjusted Mortality Rates by Cancer Site/Type and Race in Ohio 2012[1,2]

Primary Cancer Site/Type	White		Black		Asian/Pacific Islander	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
All Sites/Types	22,370	180.4	2,625	201.1	128	91.4
Bladder	624	4.9	50	4.1	1	*
Brain and Other CNS	563	4.8	36	2.7	5	2.3
Breast	1,505	12.2	235	17.5	9	6.9
Cervix	132	2.3	26	3.5	3	*
Colon and Rectum	1,982	15.8	240	18.7	13	9.0
Esophagus	663	5.3	53	4.1	1	*
Hodgkin's Lymphoma	41	0.4	4	*	0	*
Kidney and Renal Pelvis	482	3.9	54	4.1	1	*
Larynx	160	1.3	23	1.7	0	*
Leukemias	863	7.1	70	5.4	6	3.1
Liver and Intrahepatic Bile Duct	698	5.5	108	7.3	12	8.3
Lung and Bronchus	6,675	53.8	780	60.2	30	23.1
Melanoma of Skin	394	3.3	5	0.3	0	*
Multiple Myeloma	424	3.4	78	6.2	1	*
Non-Hodgkin's Lymphoma	811	6.6	48	3.8	4	*
Oral Cavity and Pharynx	319	2.6	31	2.3	1	*
Ovary	544	8	49	6.3	4	*
Pancreas	1,472	11.7	166	12.5	6	4.0
Prostate	888	17.7	173	38.3	4	*
Stomach	275	2.2	66	5.3	6	4.4
Testis	14	0.3	2	*	0	*
Thyroid	55	0.4	7	0.6	0	*
Uterus	332	4.8	50	6.2	2	*

[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.

* Rates are suppressed when the total count is less than five.

CNS=Central Nervous System

GLOSSARY

100 percent Tobacco-free Policies (schools and colleges)
A policy which prohibits tobacco use and possession at all facilities, at all events on school property, and at all school sponsored events at all times. Learn more about tobacco-free K-12 schools here: http://www.odh.ohio.gov/odhprograms/eh/quitnow/Tobacco/Protection/TFSL.aspx and tobacco-free universities and college campuses here: http://www.odh.ohio.gov/odhprograms/eh/quitnow/Tobacco/Protection/tfsfcam.aspx.

American Congress of Obstetricians and Gynecologists (ACOG)
A professional association of physicians specializing in obstetrics and gynecology in the United States.

American College of Surgeons Commission on Cancer (CoC)
A consortium of professional organizations dedicated to improving survival and quality of life for cancer patients through standard-setting, prevention, research, education, and the monitoring of comprehensive quality care.

Behavior Risk Factor Surveillance System (BRFSS)
A United States health survey that looks at behavioral risk factors. It is run by CDC and conducted by the individual state health departments. The survey is administered by telephone and is the world's largest such survey. In 2009, the BRFSS began conducting surveys by cellular phone in addition to traditional "landline" telephone.

Body Mass Index (BMI)
A key index for relating weight to height. BMI is a person's weight in kilograms (kg) divided by his or her height in meters squared. The CDC and the National Institutes of Health (NIH) now defines normal weight, overweight, and obesity according to BMI rather than the traditional height/weight charts.

Center for Advance Palliative Care
A national organization dedicated to increasing the availability of quality palliative care services for people facing serious illness.

Clinical trials
Research studies in which people help doctors find ways to improve health and cancer care. Each study tries to answer scientific questions and to find better ways to prevent, diagnose, or treat cancer.

Community Health Worker (CHW)
A frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the CHW to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery.

Complete Streets
Streets that are designed for safe access with all users in mind. They may include bike lanes, sidewalks, bus lanes, median islands and frequent marked safe crossing locations.

Good Food Here
An initiative led by the Creating Healthy Communities program at ODH. Good Food Here provides marketing materials and technical assistance for small retail store owners in Ohio who are interested in selling fresh produce and other healthy food items such as whole grains, low fat dairy, leans meats, and low sodium foods.

Health Disparity: According to Health Equity & Disparities, National Partnership for Action to End Health Disparities, 2011, health disparities can be defined as a "particular type of health difference that is closely linked with social or economic disadvantage. Health disparities adversely affect groups of people who have systematically experienced a greater social and/or economic obstacle to health and/or a clean environment based on their race or ethnic group; religion; socioeconomic status; gender type; age; mental health; cognitive, sensory or physical disability; sexual orientation; geographic location; or other characteristics historically linked to discrimination or exclusion."

Health Equity
The absence of disparities in health or the social determinates of health between more or less advantaged social groups. (Braveman, P., and Gruskin, S. (2003) Defining equity in health. *Journal of Epidemiology and Community Health*, 54(4), 254-258.)

Hospice
Considered to be the model for quality, compassionate care for people facing a life-limiting illness or injury, hospice care involves a team-oriented approach to expert medical care, pain management, and emotional and spiritual support expressly tailored to the patient's needs and wishes. Support is provided to the patient's loved ones as well. Hospice services are available to patients of any age, religion, race, or illness and care is covered under Medicare, Medicaid, most private insurance plans, health maintenance organizations (HMOs), and other managed care organizations.

Hospice and Palliative Care Credentialing Center (HPCC)
An organization specializing in credentialing for nurses in hospice and palliative care.

National Association of Social Workers (NASW), Professional Social Work Certification and Advanced Practice Specialty Certification

Certifying body for social workers specializing in hospice and palliative care.

The National Colorectal Cancer Roundtable

"80 percent x 2018," is an initiative in which dozens of organizations have partnered with the American Cancer Society (ACS) and the CDC to eliminate colon and rectum cancer as a major public health problem. Together they are working toward the shared goal of 80 percent of adults age 50 and older being regularly screened for colon and rectum cancer by 2018.

National Comprehensive Cancer Network (NCCN)

A not-for-profit alliance of centers that develops practice guidelines to help in making informed treatment decisions.

National Society of Genetic Counselors (NSGC)

An organization that advances the various roles of genetic counselors in health care by fostering education, research, and public policy to ensure the availability of quality genetic services.

National Palliative Care Registry

The National Palliative Care Registry™ is the only repository of information about the operational features (structures and processes of care) of the nation's hospital-based palliative care services. The goal of the registry is two-fold: (1) assist hospital palliative care services in tracking their development year-to-year, and (2) promote standardization and improve the quality of palliative care in the United States.

National Palliative Care Research Center

The mission of the National Palliative Care Research Center (NPCRC) is to improve care for patients with serious illness and the needs of their families by promoting palliative care research. In partnership with the Center to Advance Palliative Care, the NPCRC will rapidly translate these findings into clinical practice. Specifically, the NPCRC is providing a mechanism to:

- Establish priorities for palliative care research;
- Develop a new generation of researchers in palliative care; and,
- Coordinate and support studies focused on improving care for patients and families living with serious illness.

Ohio Cancer Genetics Network (OCGN)

A group of Ohio cancer genetic counselors and public health staff working together to increase awareness in the state about strategies to prevent/reduce the incidence of heritable cancers.

Ohio Cancer Risk Assessment Sites (OCRAS)
Ohio healthcare facilities that provide cancer risk assessment and counseling services by licensed genetic counselors specializing in cancer genetic counseling.

Ohio Partners for Cancer Control (OPCC)
A collaboration of organizations, distinct programs and individuals dedicated to reducing the cancer burden in Ohio and ultimately improve the overall population health. The OPCC includes cross-cutting objectives that will have impact on policies, systems and environmental change to control outcomes and encourage behavior change.

Ohio Tobacco Quit Line
A telephone counseling service which offers help to quit tobacco use. Accessible by calling 1-800-QUIT-NOW (1-800-784-8669), trained coaches assist participants in creating a personalized quit plan. Support in dealing with cravings and other aspects of the quit process is offered, as well as text messaging and online support. See https://ohio.quitlogix.org/ for more information and online support.

Palliative care
Encompasses a continuum of support, including pain and symptom management, from the time of diagnosis throughout the course of illness.

Patient Centered Services
Specialized care for people with a cancer diagnosis that focuses on improving quality of life for those persons and their support system. Patient centered services are provided by a team of specialists who work together with a patient's oncologist to provide extra layers of support in conjunction with curative treatment services are customized for each patient.

Patient Navigator
Someone who provides personal guidance to patients as they move through the health care system. Patient navigators may have professional medical, legal, financial, or administrative experience. Patient navigators work with patients and families to help with many different needs associated with the health care system. This may include helping with insurance problems, finding doctors, explaining treatment and care options, going with patients to visits, communicating with their health care team, assisting caregivers, and managing medical paperwork.

Smoke-free Housing Workgroup

A group of stakeholders from various federal (e.g. Housing and Urban Development and Agriculture), state agencies (e.g. Health, Fire Marshal, Commerce, Mental Health and Addiction Services), and housing-related groups (e.g. Ohio Housing and Finance Agency, Columbus Apartment Association, Cuyahoga Metropolitan Housing Authority) to improve statewide partnerships and collaborative efforts amongst public health advocates, housing constituents, and state and local officials to educate, promote, and affect social policy change to protect residents from involuntary exposure to secondhand smoke in multi-unit housing in Ohio. See www.odh.ohio.gov/sfmuh for more information on this initiative.

Sharrows

Image painted on a road that includes arrows and a bicycle indicating that the road is to be shared with those on bicycles.

LIST OF OHIO PARTNERS

FOR CANCER CONTROL ORGANIZATIONS REPRESENTED AND INDIVIDUAL MEMBERS

Organization
American Cancer Society
American Cancer Society Cancer Action Network
American College of Surgeons, Commission on Cancer
Cancer Support Community of Central Ohio
Case Western Reserve University
Cuyahoga County Board of Health
Hospice of Central Ohio
Knox Community Hospital
Komen Columbus
Licking County Health Department
Miami Valley Hospital Comprehensive Cancer Center
National Association of Chronic Disease Directors
Nationwide Children's Hospital
Nisonger Center
Ohio Academy of Family Physicians
Ohio Association of Community Health Centers
Ohio Cancer Registrars Association
Ohio Commission on Minority Health
Ohio Department of Health
Ohio Dermatological Association
Marion General Hospital
Ohio Health Research-Innovation Institute
Ohio Hematology Oncology Society
Ohio Hospice
Ohio Nurses Association

Ohio Osteopathic Association
Ohio Public Health Association
OhioHealth
Promedica
QIO, Health Services Advisory Group
Race for Hope
Summa Health System
The Gathering Place, A Caring Community for Those Touched By Cancer
The Leukemia & Lymphoma Society, TriState Southern Ohio Chapter
The Leukemia Lymphoma Society
The Ohio State University Appalachia Community Cancer Network
The Ohio State University Wexner Medical Center, James Cancer Hospital & Solove Research Institute
Union County Health Department
University of Toledo Medical Center
Zanesville Muskingum County Health Department

Individual Members

Denise Binion
Dori Klemansi
Joseph Portel

THE OHIO COMPREHENSIVE CANCER CONTROL PLAN 2015-2020

Ohio Partners for Cancer Control
May 2015