

Tobacco

**HPV** 

Nutritional, Physical Activity, Obesity

Early Detection and Screening

**Survivors** 





2016-2021



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## Illinois Comprehensive Cancer Control Plan 2016-2021

The Illinois Department of Public Health (IDPH) is pleased to share the 2016-2021 *Illinois Comprehensive Cancer Control Plan (Plan)*. The Plan is regularly updated and revised to better reflect the strategies and interventions possible to reduce the risk of cancer and improve the lives of Illinois residents with cancer.

The Plan is a framework for action and collaboration. There are five primary priority areas within the plan with goals and objectives that have been developed by the Illinois Cancer Partnership (ICP). Each priority area addresses specific concerns and needs using a public health approach to reflect the plan's overarching goal to reduce the burden of cancer.

IDPH extends its appreciation to those who serve on the ICP and contributed their time and expertise to the development of this plan. Together, we can reduce the burden of cancer in Illinois and ensure a better quality of life for persons with cancer.

Sincerely,

Nirav D. Shah, J.D., M.D.

Director

Illinois Department of Public Health

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## **Executive Summary**

The Plan 2016-2021 provides a framework that can guide cancer prevention work and control activities performed by individuals, local health departments, health care systems, academic institutions, state departments and divisions, nonprofit organizations, and others. This document was developed by the Illinois Cancer Partnership (ICP) and its state cancer plan work group and sub work groups. The overarching goal is to reduce cancer incidence and mortality by addressing areas across the cancer continuum from primary prevention to survivorship and palliative care.

The ICP is a broad-based, multi-organizational partnership that works in collaboration with the Illinois Comprehensive Cancer Control Program (ICCCP) to develop, implement, and monitor outcomes of the Plan. The ICP integrates public, private, and nonprofit sectors in a collaborative effort with common goals and objectives that promotes cancer prevention, reduces cancer deaths, and minimizes the burden of cancer for all individuals throughout the state. The ICP mission is to reduce the incidence, morbidity and mortality of cancer and increase survivorship in Illinois.

To strengthen the prevention efforts and reduce the burden of cancer on the citizens of Illinois, the Illinois Department of Public Health (IDPH) has developed the Illinois Cancer Leadership Team (ICLT) consisting of the ICCCP Manager, Illinois Breast and Cervical Cancer Program (IBCCP) Manager, and Illinois State Cancer Registry Program (ISCR) Manager. The ICLT will convene the IDPH Cancer Coalition (Coalition) that brings together other IDPH sections including, but not limited to: Tobacco, Cardiovascular, Immunizations, Minority Health, Illinois Behavioral Risk Factors System, Oral Health, Food Drugs and Dairy, Diabetes, HIV, WISEWOMAN, School Based Health Centers, Family Planning, Health Care Regulation, Health Protection, and the State's IPlan. All of these programs will be encouraged to participate in the ICP.

Working collaboratively will strengthen the fight against cancer, decreasing death and suffering and enriching the lives of the people of the State of Illinois.



### Introduction

This Plan provides a framework for action to reduce the cancer burden in Illinois through the implementation of high need, high feasibility, and evidence-based strategies. This Plan is intended for individuals and organizations to mobilize for policy, environmental, and system change; health equity advocacy; program development; clinical improvements; evaluation and surveillance enhancements; and other cancer prevention and control efforts. However, effective implementation of these ambitious, yet imperative goals will require an ongoing, coordinated, and collaborative effort.



Following the blueprint of the Cancer Plan Self-Assessment Tool,<sup>1</sup> the Plan was developed and partially modeled by incorporating the Centers for Disease Control and Prevention (CDC) and National Comprehensive Cancer Control Plan priority areas (NCCCP)<sup>2</sup> across the CDC's continuum of care, which includes primary prevention, screening and early detection, diagnosis, treatment, palliative care, and survivorship.<sup>3</sup> The Plan is a product of extensive collaboration by contributing partners. In part, it is adapted from the preceding plan: *Illinois Comprehensive Cancer Control Plan*, 2012-2015.<sup>4</sup> Some components and language of the prior plan have been retained in this document.

## PrioritiesFive Priority Areas for

Illinois

## Strategies

 Evidence-based approaches

#### Measures

• Determines baselines and monitors change

#### **Action Steps**

 Specific activities for partners to implement strategies



### Cancer Burden in Illinois

Cancer is the second leading cause of death in Illinois. It is estimated that 64,720 Illinoisans will be diagnosed with cancer and 24,040 Illinois residents will die from cancer in 2017.<sup>5</sup> Several risk factors play a role in the incidence and mortality rates of cancer in Illinois, such as social and environmental risk factors, as well as the disproportionate distribution (i.e., disparities) of cancer among various population groups. Some risk factors include low educational attainment, lack of insurance, and little to no access to care. Having reliable transportation is key for many suburban and rural individuals who are trying to maintain scheduled preventive

care appointments, which may be the first step in detecting cancer, as well as cancer treatment appointments which are necessary to control the disease or mitigate its effects.

Protective factors such as access to daily physical activity, social support, and maintenance of a healthy diet may decrease the risk of cancer. Cities and states also have a responsibility to support the built environment (i.e., good transportation systems for access to care, open spaces for physical activity, and access to healthy food through assistance programs and elimination of food deserts).

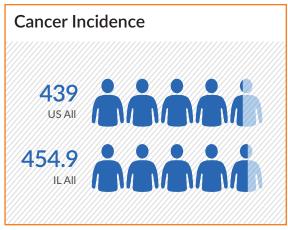


Figure 1. Cancer Incidence<sup>6</sup>

### **Demographics**

The following information is sourced from the U.S. Census Bureau.<sup>6</sup> U.S. Census Bureau estimated that as of July 1, 2016, Illinois had a total population of 12,801,539, making it the fifth most populous state in the country. That same year, it was estimated that 1,477,545 Illinoisans (11.5%) live in rural areas.<sup>7</sup> The 2015 census population estimate is 50.9 percent female. More than one in five (23%) are younger than 18 years of age, and 12.5 percent are over the age of 65. The Illinois population is 61.9 percent non-Hispanic White, 14.7 percent non-Hispanic Black, 16.9 percent Hispanic/Latino, and 5.5 percent Asian. Estimates representative of the years 2011 to 2015 indicate 14.0 percent of residents are foreign born.



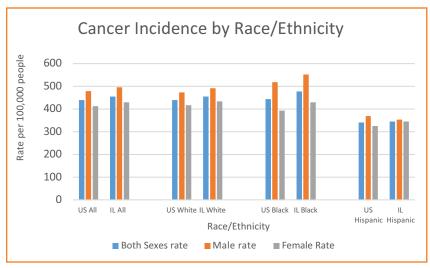


Figure 2. Cancer Incidence by Race/Ethnicity<sup>8</sup>

#### **Incidence Rates**

In 2013, the overall cancer incidence rates, in Illinois, for female, male, and the sexes combined were, 429.6, 495.8, and 454.9 per 100,000, respectively.8 These rates—both sexes combined, males and females—are higher than national rates. The leading type of cancer in Illinois is breast cancer in women (age-adjusted incidence rate of 130.1 per 100,000) and prostate cancer for men (age-adjusted incidence rate of 105.3 per 100,000). The five most

common cancer diagnoses include breast (female), lung and bronchus, prostate, colon and rectum, and bladder.9

### **Social Factors**

Social factors are associated with cancer risk. The following estimates are discussed due to their importance in understanding the factors that may affect cancer incidence, mortality, treatment, and survivorship. Between 2011 to 2015, data indicate that 87.9 percent of Illinoisans over the age of 25 had a high school diploma and 32.3 percent of Illinoisans over the age of 25 had a Bachelor's degree or higher. Those holding bachelor's degrees earn about \$2.27 million over their lifetime. Those with bachelor's degrees, no matter the field, earn vastly more than counterparts with some college (\$1.55 million in lifetime earnings) or a high school diploma (\$1.30 million lifetime). The median household income in Illinois is \$57,574 and 13.6 percent live in poverty. In 2015, 8.1 percent of Illinois residents were uninsured. This is significant because data suggest that uninsured adults have less access to recommended care, receive poorer quality of care, and experience worse health outcomes than insured adults. Between the years 2011 to 2015 data indicate that 7.1 percent of those under the age of 65 had a disability. According to the CDC, individuals with disabilities often face multiple barriers that make it difficult for them to function on a day to day basis, such as communication, physical, policy, social, and transportation barriers, to name a few. Overall, the hurdles that individuals with disabilities must overcome can negatively affect their access to optimal health.



#### Behavioral Risk Factors

Behavioral factors are also associated with cancer risk according to Behavioral Risk Factor Surveillance System<sup>17</sup>:

20.9%	Binge Drinkers
6.3%	Heavy Drinkers
30.2%	Obese
35.0%	Overweight
15.2%	Currently Smoke
23.3%	Former Smokers
3.2%	Currently Use Smokeless Tobacco

Additionally, there are behaviors which reduce the risk of cancer incidence and/or mortality. For example:

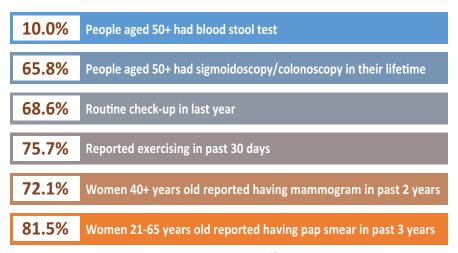


Figure 4. Behaviors that reduce the risk of Cancer<sup>17</sup>

### **Death Rates**

In 2013, there were 24,491 deaths from cancer, including 12,520 men and 11,971 women in Illinois. The age-adjusted cancer mortality rates per 100,000 for Illinois were 171.7, 205.1, and 148.5 for both sexes combined, males, and females, respectively. Of note, the total rate of cancer mortality in Illinois is higher than the rate of the U.S.. The five leading causes of cancer death were lung, breast (women), prostate, colorectal, and pancreatic cancers. The leading cause of cancer death for both men and women in Illinois was lung and bronchus cancer. Breast cancer in women and prostate cancer in men were the second leading cause of death for women and men, respectively.



### **Cancer Disparities**

Compared to the U.S. average, cancer incidence and mortality rates indicate that Illinois residents generally experience higher rates of cancer incidence and death.

Certain groups suffer disproportionately from cancer incidence based on age, education, ethnicity, gender, disability, geographic location, income and race. Racial and ethnic disparities play a role in cancer incidence and mortality rate that are present in Illinois, as well as low socioeconomic status (SES). Studies have found that SES plays a significant role, arguably more than race or ethnicity, in predicting the likelihood of an individual's having access to education, occupation, insurance, and living conditions.

Overall, an individual's level of SES determines their general

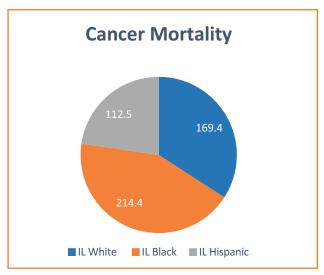


Figure 5. Illinois Cancer Mortality<sup>20</sup>

social standing. An individual's SES appears to play a role in behavior factors that influence risk of cancer, such as smoking, lack of physical activity, excessive alcohol intake, and following cancer screening recommendations. Additionally, racial and ethnic disparities in cancer incidence and mortality rates are present in Illinois. Cancer incidence rates are higher in Blacks than in Whites for both sexes combined and for males and females separately. Cancer incidence in Hispanics is lower than for Whites or Blacks. Breast and prostate cancers have the highest incidence in women and men, respectively, across all race/ethnic groups. There is no notable difference in breast cancer incidence rates per 100,000 between White (130.1) and Black (130.8) women, but rates are notably lower among Hispanic women (91.2) comparatively. Black men have higher prostate cancer incidence rates (158.7) compared to men of other race/ethnic groups (98.5 and 93.2 in Whites and Hispanics, respectively). Overall, cancer incidence is highest among Blacks and lowest among Hispanics in Illinois. All cancer mortality rates are higher among Blacks compared to Whites and Hispanics. Lung cancer mortality is the highest cancer-associated cause of death regardless of sex or race/ethnicity. Lung cancer mortality is highest in Blacks for both sexes combined and for males and females separately. Breast (female), prostate, and colorectal cancer mortality rates are higher in Blacks compared to Whites and Hispanics.

Another way to examine cancer disparities is by geography – specifically, recognizing that the context for life and health differs between metropolitan, urban, and rural settings. There are cancer mortality differences in the southern and central rural parts of the state compared to the state as a whole. The total age-adjusted cancer mortality rate between 2006 and 2010 in the state was 183.9 per 100,000, but rates in the central and southern rural parts of the state were 196.0 and 191.5 per 100,000, respectively.<sup>22</sup>



### Data and Surveillance

Surveillance data are the backbone of public health practice and cancer surveillance data are essential to developing any rational and meaningful cancer control program. Cancer surveillance data help to identify and prioritize at-risk populations for prevention strategies; describe and monitor cancer trends so that appropriate and timely interventions can be implemented; conduct and advance research related to etiology, prevention, and treatment of cancer; plan and evaluate cancer screening, control, and educational programs; and investigate public concerns about suspected high numbers of cancer diagnosis. Gathering and analyzing data is imperative when it comes to cancer control because it demonstrates, through its measurement, the cancer burden and disparities that exist in the state. Additionally, data identifies progress in the reductions of cancer incidence, mortality, and disparities.

In Illinois, cancer surveillance data are routinely collected and disseminated by several statewide and population-based data sources. These sources include the Illinois State Cancer Registry (ISCR), the Illinois Behavioral Risk Factor Surveillance System (BRFSS), and Illinois Vital Records (VR). Together they provide information about who has cancer-related behavioral risks, been screened for cancer, been diagnosed with cancer, and died from cancer. ISCR, as a center piece of the Illinois' cancer surveillance system, has collected more than 1.7 million new cancer cases in its database, disseminated data widely to cancer control programs and researchers, and consistently achieved the Gold Standard certification, the highest possible status, from the North American Association of Central Cancer Registries (NAACCR) for data integrity. Despite the achievement, new challenges and demands are continuously raised by the ever-changing health care environment and cancer control communities. This comprehensive cancer plan aims to maintain our previous progress and to addresses gaps identified in the existing cancer data and surveillance efforts.

### Additional Data and Surveillance Targets

- Achieve at least 95% case reporting (by and to) within two years of cancer diagnosis
- Increase reporting by physician offices and pathology labs
- Meet National Program of Cancer Registries (NPCR)/(NAACCR) quality standards
- Meet public need for 'open data'
- Translate data into information that supports cancer control programs
- Release data to researchers under the guidance of the Institutional Review Board (IRB)



### 2015 - 2020 Illinois Priorities

#### Tobacco

- Decrease the proportion of adults using tobacco products
- Promote utilization of the Illinois Tobacco Quitline (ITQL)
- Increase the proportion of homes with smokefree policies
- Promote smoking cessation among survivors who smoke

#### **HPV**

- Promote evidence-based education on HPV prevention and transmission prevention
- Increase the proportion of eligible adolescents who have completed the HPV vaccination series
- Promote oral and pharyngeal cancer screening by dentists and dental hygienists

### Nutrition, Physical Activity, Obesity

- Decrease the proportion of adults who are obese or overweight
- Decrease the proportion of adolecents who are obese or overweight
- Decrease the proportion of adults who binge drink alcohol

### **Early Detection and Screening**

- Increase the number of women who meet the US Preventative Task Force guidelines (21-65 years old) who receive a pap smear
- Increase the number of women 40 years and older that receive a mammogram
- Promote LDCT screening recommendations among primary care providers and patients
- Increase the number of adults age 50-75 who recieve colorectal cancer screening

### Survivors

- Develop small communications campaign focusing on survivor care
- Provide educational resources, technical assistance, and support to faith-based survivorship programs
- Participate in Women's Health Conference and offer cancer survivorship session focusing on providers offering survivor care plans
- Provide training for health care providers focused on survivorship care planning that includes chronic disease self management



### Tobacco

By preventing the onset or continuation of tobacco use, individuals can reduce their chances of contracting many forms of chronic disease, including many identified forms of cancer. Smoking adversely affects every organ in the human body. Smoking is defined as the inhalation of smoke, burning of tobacco or other substances, or the use of e-cigarette vaporizers. Tobacco products include cigarettes, pipes, cigars, and smokeless tobacco.

In the latest Surgeon General's report on the health effects of smoking, there is evidence sufficient to infer a causal relationship between smoking and lung, oral cavity and pharynx, larynx, esophagus, bladder, pancreas, kidney, cervix, stomach, acute myeloid leukemia, colon and rectum, and liver cancers.<sup>23</sup> A study from the American Cancer Society estimated that, in 2014, 29.3 percent of deaths in adults aged 35 and older were due to smoking, including 34.5 percent of deaths in men and 23.9 percent of deaths in women.<sup>24</sup>

### Strategies - Action Steps - Measures

### Decrease the proportion of adults using tobacco products

- Support evidenced-based tobacco prevention and cessation programs targeted at adults, including programs for smokeless tobacco product cessation
- Promote utilization of the Illinois Tobacco Quitline increase health care providers that refer through the Fax Referral Program
- Increase public knowledge through media use
- Partner with other programs to promote the ITQL

### Baseline 15.2% Target 12%

### Promote utilization of the Illinois Tobacco Quitline (ITQL)

- Promote the Illinois Tobacco Quitline (ITQL) through health communications strategies through collaboration with the ITQL and its media vendor to implement a coordinated media and marketing campaign to promote the ITQL to targeted audiences throughout the state, through a variety of formats including television, radio, online, social media, print and transit advertising
- Provide technical assistance and informational materials to local health departments that train and enroll organizations (health care providers and systems; worksite wellness programs; and community-based organizations) for referral of tobacco-using patients or employees to the ITQL
- Gather and utilize demographic data to identify populations not reached by the ITQL.
   Target these subpopulations through culturally appropriate health communications messaging

Baseline 17,323 callers Target 19,055 callers



### Decrease the proportion of adults using tobacco products

- Promote smoking cessation among survivors who smoke
- Utilize existing state and local partnerships and build new ones to promote and provide education regarding the benefits of smoke-free multi-unit housing
- Collaborate with partners on approaches, message development, and messengers to reach populations affected by secondhand smoke (This collaboration will include conducting market research to understand the target audience and appropriate messages for reaching the audience
- Identify creative materials from available media resources on the benefits of smoke-free housing, conduct media advocacy with local coalitions and implement a mass-reach health communications campaign
- Provide technical assistance to local partners on smoke-free multi-unit housing policies

Baseline 84.5% Target 93.0%

### Tobacco Strategies <sup>25,26,27</sup>

### **Additional Tobacco Targets**

- Decrease the proportion of high school students (grades 9-12) who currently smoke cigarettes (at least one day during the month prior to survey) tobacco products from 14.1% to 12.2% by 2021
- Decrease the proportion of Illinois residents exposed to secondhand smoke by 10% by 2021
- Increase proportion of workers protected by smoke free policies from 85.9% to 94.5% by 2021
- Decrease the proportion of youth and adults who use electronic cigarettes by 10% from the baseline measurement by 2021
- Decrease the proportion of youth who currently use electronic vapor products from 26.6% to 23.2% by 2012
- Decrease the proportion of cancer survivors who smoke by 10% by 2021

## Human Papillomavirus (HPV) Vaccination

Between 2008 and 2012, 7,997 HPV-associated cancers were diagnosed in Illinois. It is estimated that 6,070 cancer cases in Illinois between 2008 and 2012 are specifically attributable to HPV with cervical (2,560 cases) and oropharyngeal (1,950 cases) being the most commonly diagnosed HPV-attributed cancers.<sup>28</sup> While overall trends in HPV-associated cancers have been relatively stable over the last ten years, HPV-associated oral cancers in males (specifically White males) increased significantly between 2003 and 2012 in Illinois from 5.5 to 7.5 per 100,000. HPV-associated cervical cancer incidence rates have declined among all racial/ethnic groups in recent years. HPV-associated cancer incidence and mortality can be prevented with adherence to HPV vaccination recommendations. The Advisory Committee on Immunization Practices (ACIP) recommends HPV vaccination as part of the routine vaccination regimen for adolescents aged 11 and 12.<sup>29</sup> Vaccination is also recommended for females aged 13 to 26 and males aged 13 to 21 who have not previously been vaccinated.



### Strategies - Action Steps - Measures

Increase the proportion of eligible adolecents who have completed the vaccination series in accordance with the most current ACIP reccomendations

- Increase awareness on vaccine benefits through infographics, resource guides, social media messaging, and cancer-related educational materials
- Provide education and tools to increase awareness in School Based Health Centers
- Promote evidence-based education on HPV prevention and transmission

Females
Baseline
68.4%
Target

80%

Males Baseline 64.5% Target

80%

HPV Strategies 30

### Additional HPV Targets

- Promote oral and pharyngeal cancer screenings by dentists and dental hygienists
- Educate health care providers, including primary care providers and dentists, about the HPV burden, vaccine schedule and the importance of completing the vaccination series

#### **HPV Vaccination**

The IDPH Immunization Section conducts programs and initiatives designed to ensure Illinois children are up-to-date with immunizations including HPV vaccinations. Relevant programs are:

- Illinois Comprehensive Automated Immunization Registry Exchange (I-CARE)
- Vaccines for Children (VFC)

### Nutrition, Physical Activity, and Obesity

One of the earliest cancer prevention measures that can be taken in an individual's life is to develop appropriate nutrition and exercise habits. It is estimated that if current obesity trends continue, it will lead to 500,000 additional cases of cancer in the U.S. by 2030.<sup>31</sup> Being overweight or obese is associated with an increased risk for some types of cancer including endometrial (cancer of the lining of the uterus), colorectal, prostate, kidney, and postmenopausal breast cancer. Factors contributing to obesity can include sedentary behavior and poor dietary habits including low consumption of fruits and vegetables and increased consumption of sugar-sweetened beverages.

In 2014, the USDA set fixed standards for schools that participate in the National School Lunch and/or School Breakfast Programs.<sup>32</sup> The standards set limits on calories, sodium, fat, and sugar for snack and entrée



items sold by schools to their students. Further, there are requirements that foods be "whole-grain rich", have the first ingredient be a fruit, vegetable, dairy product, or protein, or be a food that contains at least a quarter of a cup of fruits and/or vegetables. Additionally, beverages must be water, unflavored low-fat milk, fat-free milks, or 100% fruit juices. A detailed description of the standards for Illinois schools during the 2016-2017 school year can be found here: https://www.isbe.net/documents/admin-handbook-2016-17.pdf.

It is recommended that Illinois' schools not only meet these nutritional standards, but also adopt more stringent standards than the USDA requires. Such policies could range from a limiting of processed red meats on school menus to requiring set amounts of vitamins and minerals present in foods sold in school vending machines. In addition to nutritional standards, it is recommended that the state strictly enforce the daily physical education law for K-12 students. Currently, there are schools that are providing the necessary written assurances, but failing to comply with the law as written.<sup>33</sup> Like healthy eating habits, physical activity at a young age often encourages healthy habits later in life which can prevent obesity and related cancers. Alcohol use, especially excessive alcohol use, has been found to be associated with some cancers, including head and neck, liver, breast, esophagus, and colorectal cancers. While breast feeding has immediate, intermediate, and long-term benefits to the infant, it can also help reduce breast and ovarian

More than one-third (36.5%) of U.S. Adults are obese

Non-Hispanic Blacks have the highest Obesity Rates (48.1%) while Non-Hispanic Asians have the lowest (11.7%)

Obesity is Highest among adults 40-59 (40.2%) and adults 20-39 have the lowest (32.3%)

The obesity prevalence in youth is 17%

Figure 6. Obesity Statistics<sup>27</sup>

cancer risk in the breastfeeding mother, especially when breastfeeding is done over an extended period. Breastfeeding is also associated with a reduced risk of estrogen receptor negative breast cancers that are more frequent in young and African American women and have worse prognosis than other breast cancers.<sup>34</sup>



### Strategies - Action Steps - Measures

## Decrease the proportion of adults who are obese or overweight

- Promote annual screening for obesity by primary care physicians
- Increase public education efforts on healthy eating practices

### Baseline 65.8% Target 58.7%

## Decrease the proportion of adolescents (grades 9-12) who are obese or overweight

- Focus on nutrition and physical activity projects for elementary school children
- Promote access to healthy foods

### Baseline 28.0%

Target 24.9%

### Decrease the proportion of adults who binge drink alcohol

 Support implementation of screening and brief intervention (SBI) for excessive drinking reccomended by the community Preventative Services Task Force in clinical settings Baseline 20.9% Target 18.8%

Nutrition, Physical Activity, and Obesity Strategies 17,35

### Additional Nutrition, Physical Activity, and Obesity Targets

- Decrease the proportion of adults and children who are overweight/obese by 10% by 2021
- Increase the proportion of adults who meet U.S. Department of Agriculture recommendations for fruit and vegetable consumption by 10%
- Increase the proportion of youth who meet current USDA recommendations for fruit and vegetable consumption by 10%
- Reduce the proportion of adults and children who regularly consume sugar-sweetened beverages
   5% by 2021
- Increase the proportion of adults who meet U.S. Department of Health and Human Services recommended guidelines for aerobic and strength activity by 10% by 2021
- Increase the proportion of youth who regularly participate in moderate physical activity
- Decrease the proportion of Illinois residents who consume excessive amounts of alcohol from 31.7% to 28.5% by 2021
- Increase the proportion of new mothers who ever breastfeed their infants and who breastfeed in accordance with recommendations by 10%



### **Early Detection**

Early detection of cancer is important for the treatment of the disease. It is particularly important to screen for early forms of cancer so any issues can be noted and eradicated before progressively becoming a serious problem. Following cancer screening guidelines increases the likelihoods of detecting some form of cancers early, therefore increasing the probability of a successful treatment.<sup>36</sup> The following goals, listed below, aim to increase screening rates in the general population, in hopes of identifying cancer before symptoms occur.

### **Colorectal Cancer Screening**

Colorectal cancer is the third leading cancer diagnosis and the third leading cause of cancer death among both men and women nationwide. An estimated 6,440 Illinoisans will be diagnosed with colorectal cancer and an estimated 2,030 will die from the disease in 2017.<sup>37</sup> Colorectal cancer can be prevented and/or detected early with regular screenings. However, the most common barrier to colorectal screening, according to a 2010 study in the Journal of Preventative Medicine, is the fear of the bowel preparation prior to the colonoscopy or the procedure itself. It has been estimated that only 62.5 percent of Illinoisans over the age of 50 have ever had a Fecal Occult Blood Test (FOBT) or colorectal endoscopy (sigmoidoscopy or colonoscopy), putting the state below the national average of 67.6 percent. <sup>38,39</sup> While there is no suitable substitute for colonoscopy in identifying and removing potentially cancercausing polyps, the fecal immunochemical test (FIT) is highly-accurate and patient-friendly.<sup>40</sup>

Only 62.5% of Illinoisans over the age of 50 have ever had a FOBT or Colorectal Endoscopy Compared to the National Average of 67.6%



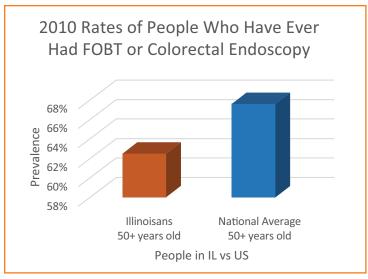


Figure 7. FOBT or Colorectal Endoscopy Rates<sup>36</sup>

The FIT process involves collection of a stool sample from a patient, often from the comfort of their own homes, without the need for any invasive procedures. If blood is detected, then a colonoscopy is recommended. If there is no detection of blood and the patient is otherwise asymptomatic, then no further testing is needed for a calendar year. Because of the ease of use and the accuracy of the FIT, it is recommended that this be promoted as an effective way to raise colorectal cancer screening rates across the state. This is especially true in areas where access to specialists who can perform a colonoscopy is limited or where the number of these specialists is limited.

### **Cervical Cancer Screening**

The incidence of cervical cancer in Illinois between 2009 and 2013 was 7.7 per 100,000 for all women, 7.0 per 100,000 for Whites, and 11.5 per 100,000 for Blacks.<sup>41</sup> Between 2009 and 2013, there were 2,634 cases of cervical cancer diagnosed in Illinois.<sup>42</sup> In addition to HPV vaccination, there are screening methods that can help reduce cervical cancer. Cervical cancer can be prevented and/or diagnosed at an earlier stage with regular Pap smear screenings, which are recommended for women aged 21-65.<sup>43</sup> Roughly four in five women (81.4 percent) of Illinois women aged 21 to 65 are up-to-date with these cancer screenings.<sup>44</sup>

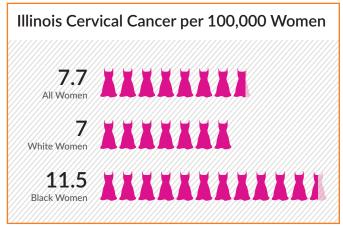


Figure 8. Illinois Cervical Cancer Statistics<sup>36</sup>



### **Breast Cancer Screening**

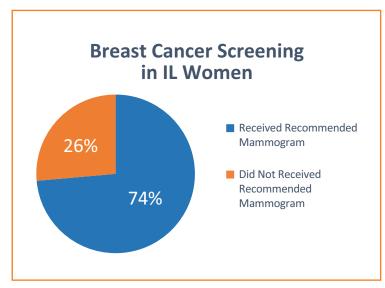


Figure 9. Breast Cancer Screening Rates<sup>41</sup>

Breast cancer is the most common cancer in Illinois women and the second leading cause of cancer death. The United States Preventive Services Task Force (USPSTF) recommends biennial mammography for women of average risk who are between the age of 50 and 74.<sup>45</sup> See American Cancer Society guidelines in Glossary B. Rates of adherence with recommendations among Illinois women (73.6 percent) are similar to the nation as a whole (73.7 percent).<sup>46</sup>

### **Lung Cancer Screening**

Lung cancer is the second most commonly diagnosed cancer among Illinois men and women and is the leading cause of cancer death among both sexes. As of 2013, the USPSTF recommends low dose computed tomography (LDCT) screening for adults aged 55 to 80 who have a 30 pack-year smoking history, or have quit within the past 15 years.<sup>47</sup> This measure is calculated based on the number of cigarettes smoked per day and the number of years someone smoked: one pack per day for 30 years is 30 pack-years or two packs per day for 15 years is equivalent.

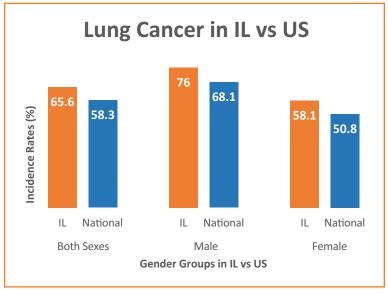


Figure 2. Cancer Incidence by Race/Ethnicity<sup>8</sup>



### Strategies - Action Steps - Measures

## Increase the proportion of women (21-65 years old) who recieve a pap smear

- Promote the Illinois Breast and Cervical Cancer Program to eligible women
- Promote the utilization of faith-based and community-based partners to assist with implementation of evidence based interventions to improve cervical cancer screening rates
- Promote utilization of the Breast and Cervical Cancer Screening and Education Provider Toolkit to evaluate and improve clinical readiness

Baseline 88.8% Target 91.8%

## Increase the proportion of women 40 years and older who recieve a mamogram

- Promote the Illinois Breast and Cervical Cancer Program to eligible women
- Promote the utilization of faith-based and community-based partners to assist with implementation of evidence based interventions to improve cervical cancer screening rates

Baseline 92.6% Target 95.6%

## Increase the proportion of adults age 50-75 who get screened for colorectal cancer

- Promote and encourage the formation of an Illinois State colorectal cancer roundtable, and encourage participation in regional roundtables
- Promote client and provider education in line with USPSTF reccomendations
- Engage State and Federal partners such as the IPHCA and FQHCs to increase the use of proven colorectal colon cancer screening tests, specifically in clinical settings

Baseline 68.3% Target 80.0%

### Early Detection Strategies 17

### Survivorship

Prioritizing the needs of individuals, as an integral part of a patient's treatment plan from the initial diagnosis to survivorship care, will promote better outcomes for patients. There are over five times as many cancer survivors today as there were 50 years ago. 48 Survivorship takes into account the patient's cancer history, treatments, needs for future check-ups and tests, long term effects of treatment, and plan to stay healthy. Cancer survivors have to adapt to both physical and mental changes throughout treatment. Therefore, survivorship addresses the needs of patents in various stages of recovery navigating personal, medical, social, and professional challenges.



### Strategies - Action Steps - Measures

Educate health care providers and patients to increase the awareness and knowledge of issues relevant to cancer survivors 44

- Create a small communications campaign focusing on improving survivorship throughout the State
- Implement a faith-based survivorship program offering educational resources, technical assistance, and support specifically, tips on lowering the risk of obesity in cancer survivors
- Enhance survivorship utilizing a dietician specializing in oncology services for survivors and their families
- Provide a session at the Women's Health Conference focused around health care providers offering cancer survivors care plans and disease self management

Baseline: Set Objectives

Target: All Objectives Met by July, 2021

Survivorship Strategies 49

### Additional Survivorship Targets

- Increase the proportion of Illinoisans who participate in clinical trials
- Increase the number of Commission on Cancer accredited cancer centers in Illinois from 74 to 81
- Increase the number of Illinois providers certified in Hospice and Palliative Medicine from 145 to 160 by 2021



### **Acknowledgements** Illinois Cancer Partnership

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The Program Directors of the Illinois Breast and Cervical Cancer Program, the Illinois Comprehensive Cancer Control Program, and the Illinois State Cancer Registry have a long standing history of working together to reduce cancer incidence and mortality in Illinois. With the assistance of Centers Disease Control and Prevention funding, we have been able to staff and resource robust programs that seek to screen, educate, and record the impact of cancer in our communities.

The Illinois Leadership Team has created a Plan which affirms our willingness to fully collaborate on the implementation of CDC designated activities to address cancer prevention and control strategies. The Illinois Cancer Leadership Team is committed to prioritizing these collaborative efforts. Successful completion of outlined activities below will contribute to an overall reduction of the cancer burden in the state of Illinois.

### Program Collaboration

- Recruit and maintain representatives for NPCR, BRFSS, and other state-based surveillance systems to actively participate on the cancer control coalitions
- Collaborate with chronic disease risk factor prevention programs to include cancer prevention and control strategies in statewide chronic disease plans
- Coordinate technical assistance and training to build capacity to implement cancer prevention and control activities

### Cancer Data and Surveillance

- Facilitate the use of cancer data for program planning and implementation efforts
- Identify high-risk populations in collaboration with cancer and other chronic disease programs (smoking and health, for example)
- Participate in joint reporting of population risks and cancer burden with other chronic disease programs using public health surveillance data

### Environmental Approaches for Sustainable Cancer Control

 Collaborate with other chronic disease programs and/or other public health programs to inform policies that support cancer prevention and control (e.g. restrictions on tanning bed use; tobacco control interventions; paid time-off for cancer screening services, HPV uptake)

## Community Clinical Linkages to Aid Patient Support

- Use registry and/or cancer mortality data to identify populations at higher risk for late-stage diagnosis or higher cancer mortality
- Collaborate with other cancer and chronic disease programs in the design and target of prevention such as HPV vaccination and tobacco cessation or screening interventions to those with increased cancer burden
- Support use of survivorship care planning and chronic disease self-management for cancer survivors

### **Health Systems Change**

- Implement (or support the implementation of)
   evidence-based interventions such as client reminders,
   provider assessment and feedback to improve cancer
   screening with in health systems. Collaborate with other
   cancer and chronic disease programs where appropriate
- Partner with health systems to use data to identify screening rates and treatment data to identify populations at risk for late-stage disease or not receiving recommended care
- Participate in and encourage electronic reporting from cancer care providers and collaborate with other state programs to achieve increased electronic reporting



## Glossary and Acronyms Glossary

Cancer — Diseases in which abnormal cells divide without control and can invade nearby tissues.

Comprehensive Cancer Control — an approach that brings together key partners and organizations to develop a plan to reduce the number of community members who get or die from cancer

Disparity — differences in cancer measures such as incidence due to race/ethnicity, gender, geography, income or other characteristics

Early Detection — Methods used to identify cancer before it has spread to other parts of the body

Incidence — The number of new cases of a disease diagnosed in each year

Primary prevention — interventions or actions that aim to prevent disease before it occurs

Surveillance — continuous collection of health data for planning, implementation, and evaluation

### Acronyms

BRFSS Behavioral Risk Factors Surveillance System

CDC Center for Disease Control and Prevention

HPV Human Papillomavirus

IBCCP Illinois Breast and Cervical Program

ICP Illinois Cancer Partnership

ICCCP Illinois Comprehensive Cancer Control Program

ICLT Illinois Cancer Leadership Team

IDPH Illinois Department of Public Health

ISCR Illinois Cancer Registry

LDCT Low Dose Computed Tomography

NAACCR North American Association of Central Cancer Registries

NCCCP National Comprehensive Cancer Control Program

NPCR National Program of Cancer Registries

SES Socioeconomic Status



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