



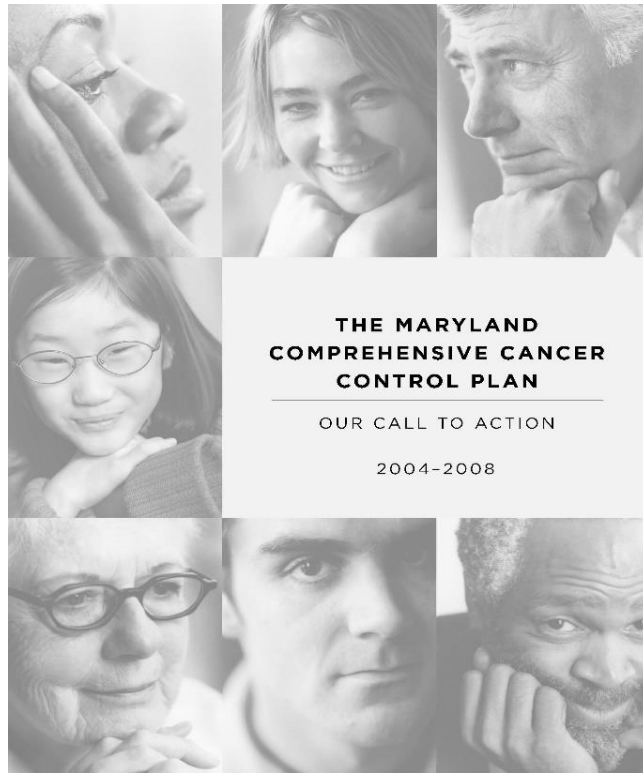
UNIVERSITY *of* MARYLAND  
SCHOOL OF MEDICINE

# 2021 – 2025 Maryland Comprehensive Cancer Control Plan

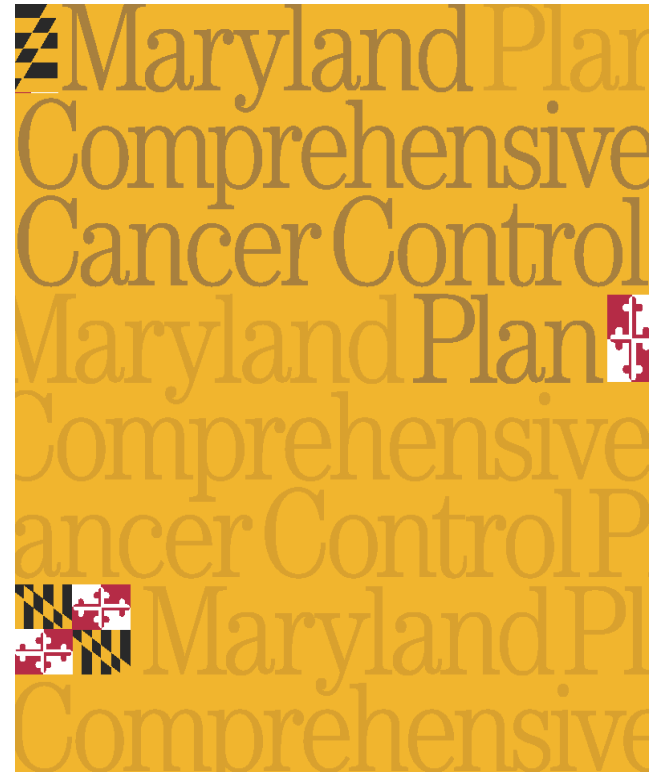
Niharika Khanna, MBBS,MD,DGO

Professor Family and Community Medicine  
Chair, Maryland Cancer Collaborative

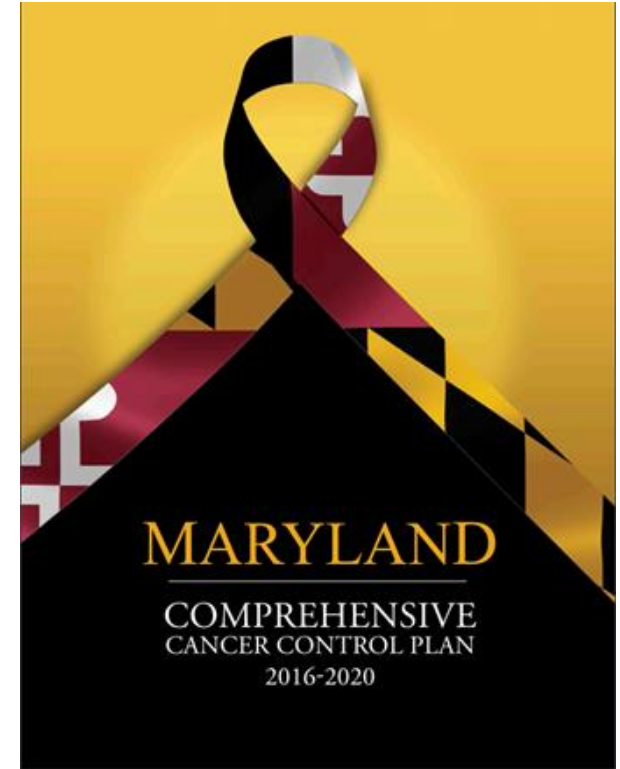
# Maryland Comprehensive Cancer Control Plan



*2004-2008 Cancer Plan*



*2011-2015 Cancer Plan*



*2016-2020 Cancer Plan*

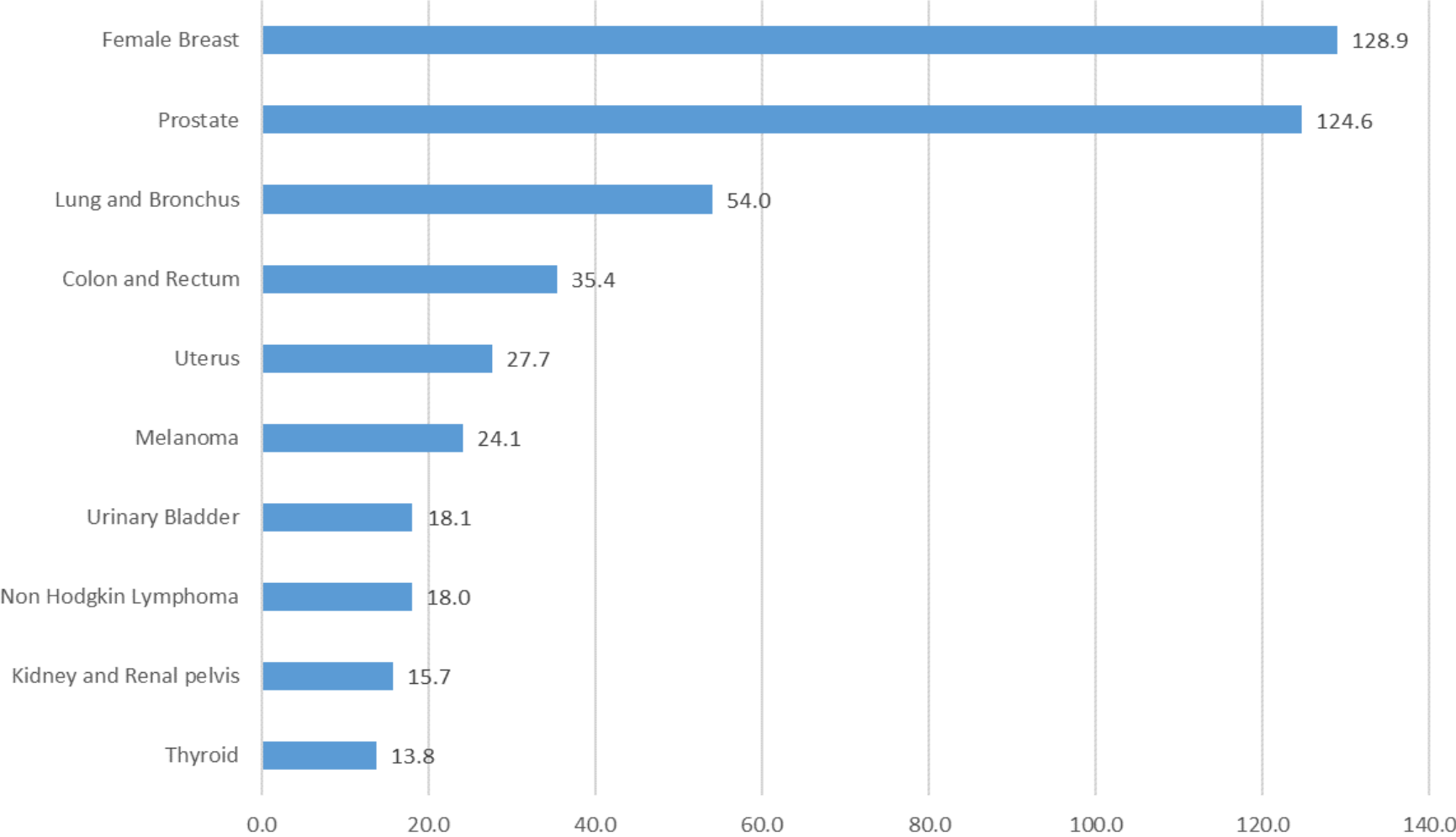
# Maryland Cancer Data - 2016

- 31,079 new cases of cancer in Maryland in 2016
- 10,911 cancer deaths in Maryland in 2016
  - 2nd leading cause of death in Maryland (22.3%), behind heart disease (23.3%)

From 2007 to 2016:

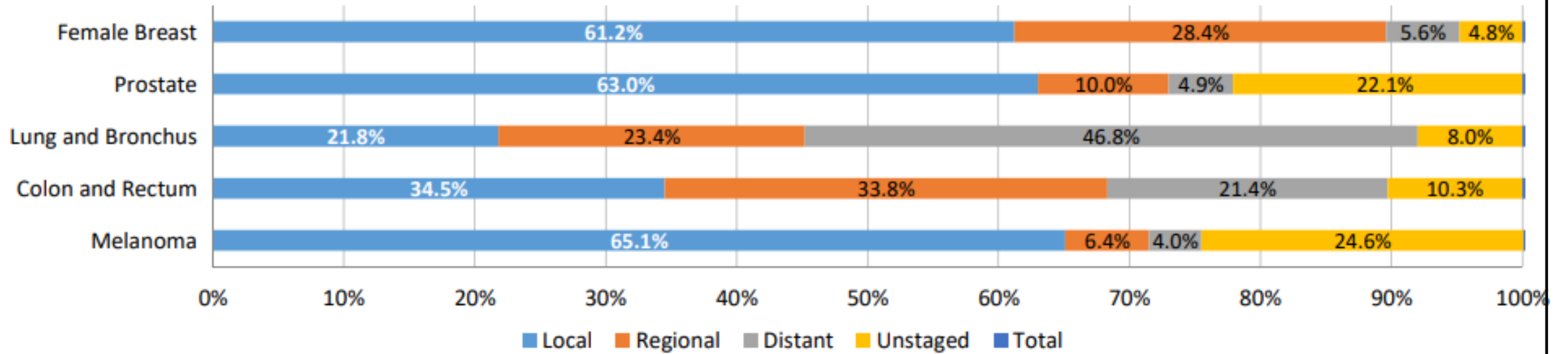
- All sites cancer incidence rates in Maryland remained relatively steady
  - Decreased 0.4% per year
- All sites cancer mortality rates in Maryland decreased
  - Decreased 1.8% per year

# Top 10 Cancers in Maryland by Age-Adjusted Incidence Rate (per 100,000), 2016



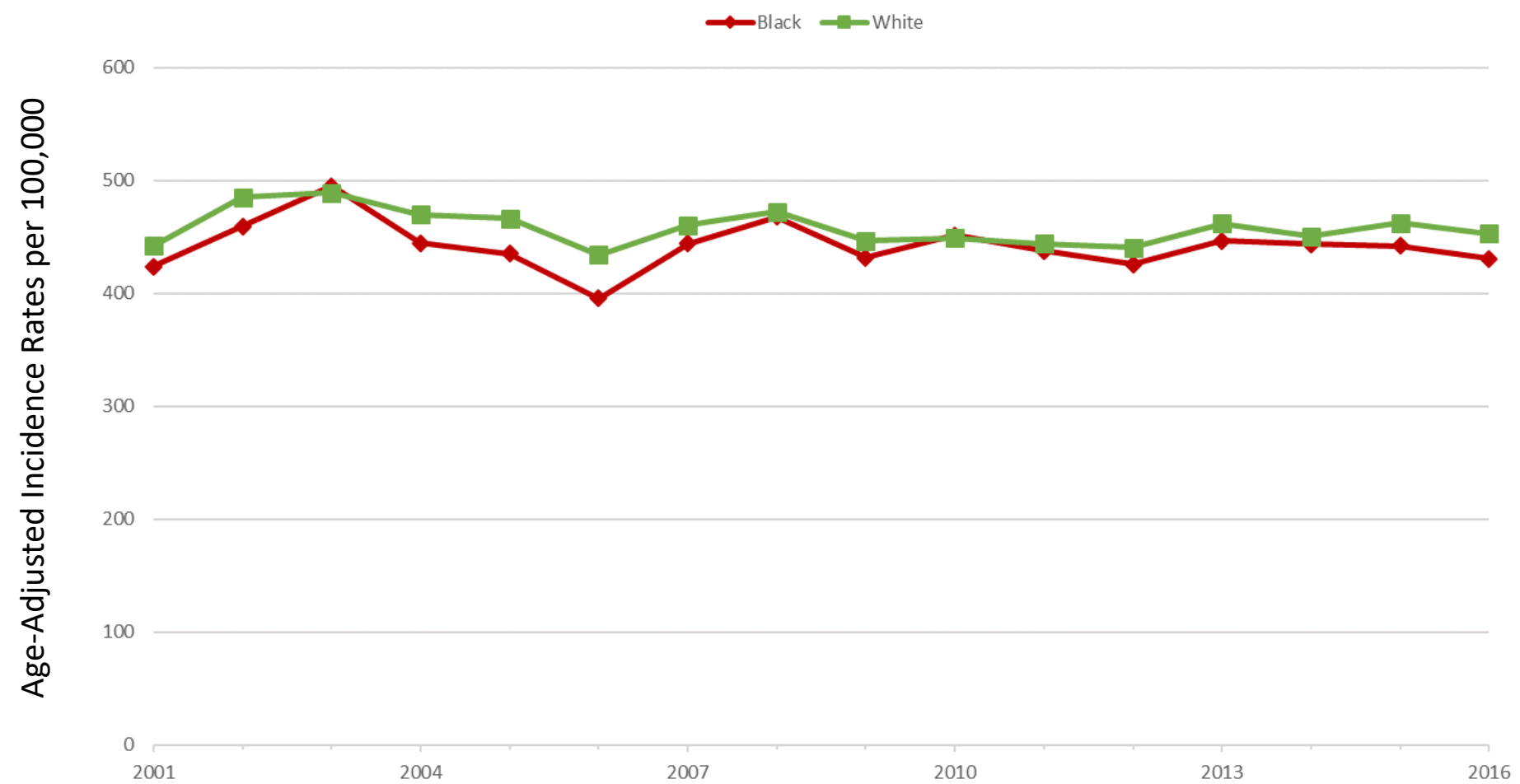
Data Source: Maryland Cancer Registry

## Stage at Diagnosis for Top 5 Cancers in Maryland, Based on Incidence Counts, 2012-2016



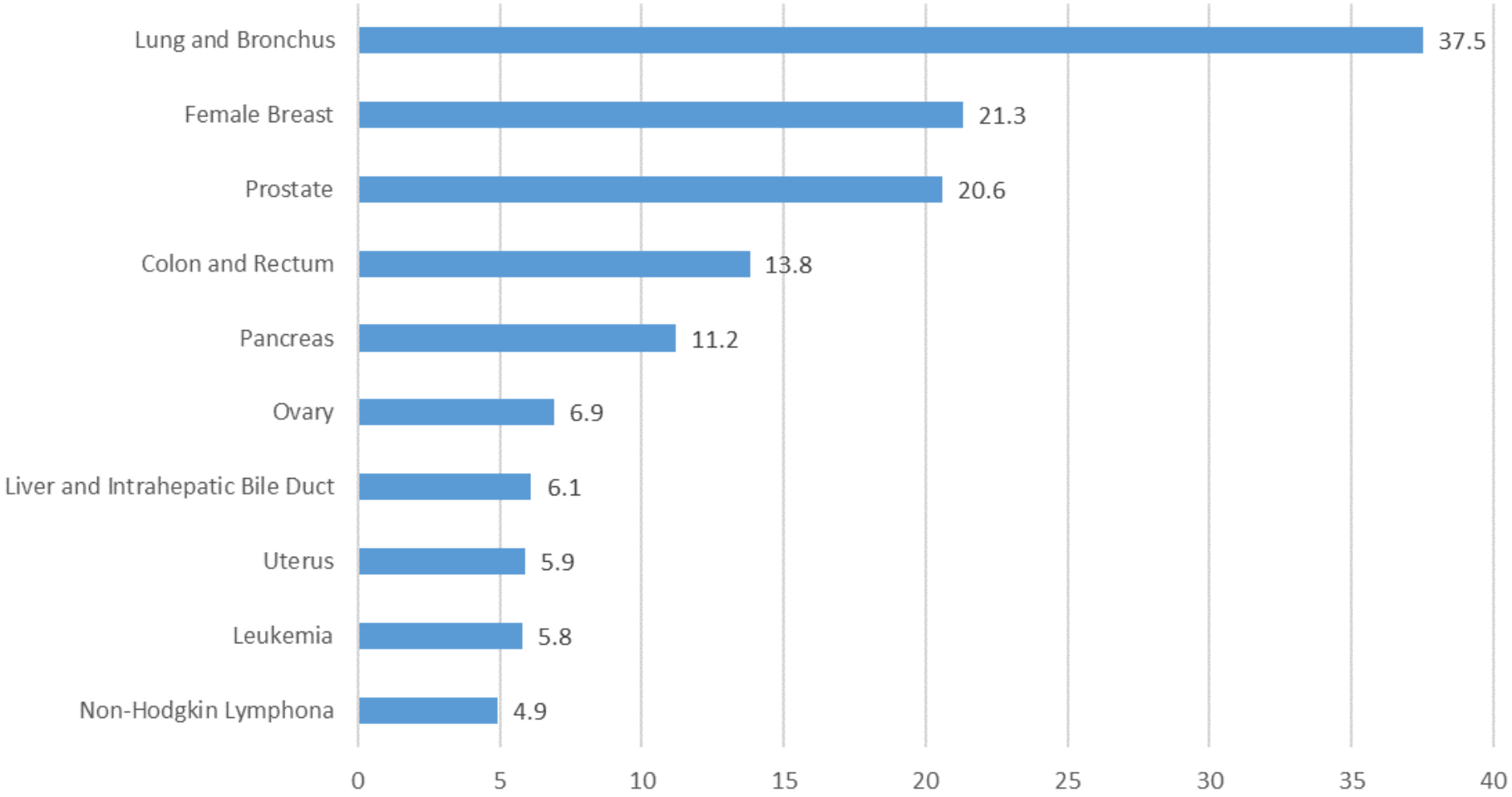
Data Source: Maryland Cancer Registry (2016 Incidence and Mortality Report)

# All Cancer Sites Age-Adjusted Incidence Rates in Maryland by Race, 2001-2016



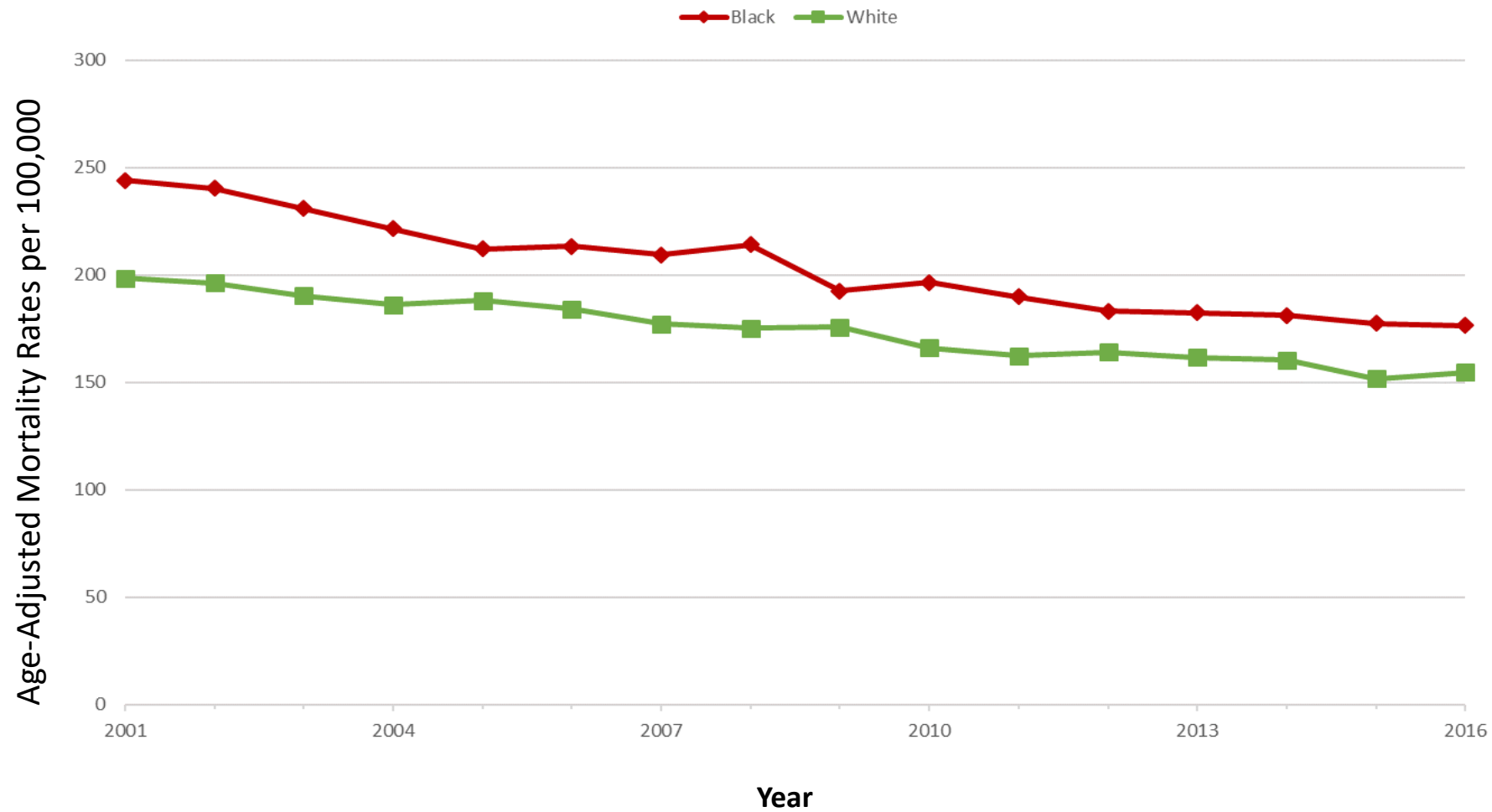
Data Source: Maryland Cancer Registry

# Top 10 Cancers in Maryland by Age-Adjusted Mortality Rate (per 100,000), 2016



Data Source: CDC WONDER, NCHS Compressed Mortality File

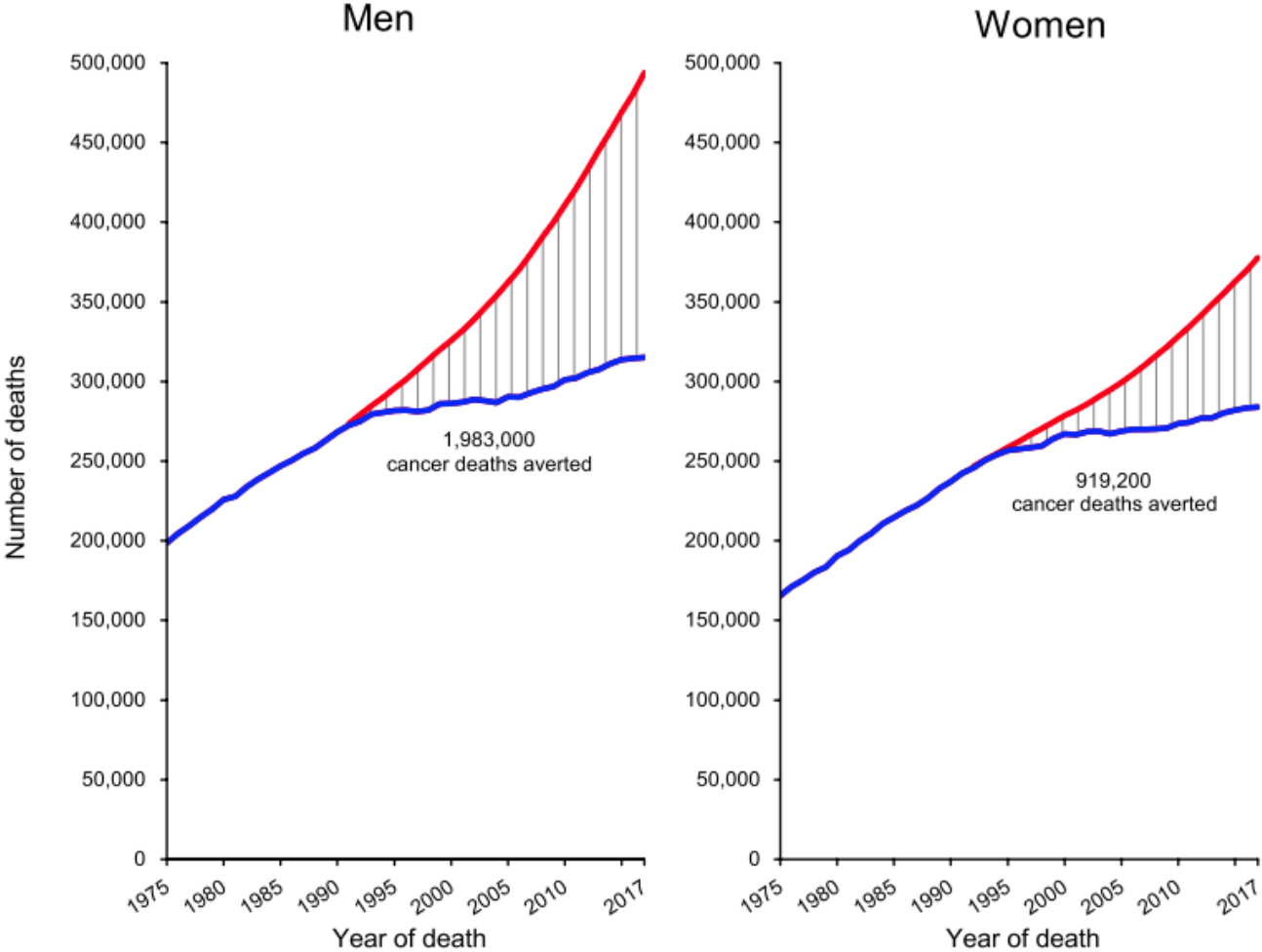
# All Cancer Sites Age-Adjusted Mortality Rates in Maryland by Race, 2001-2016

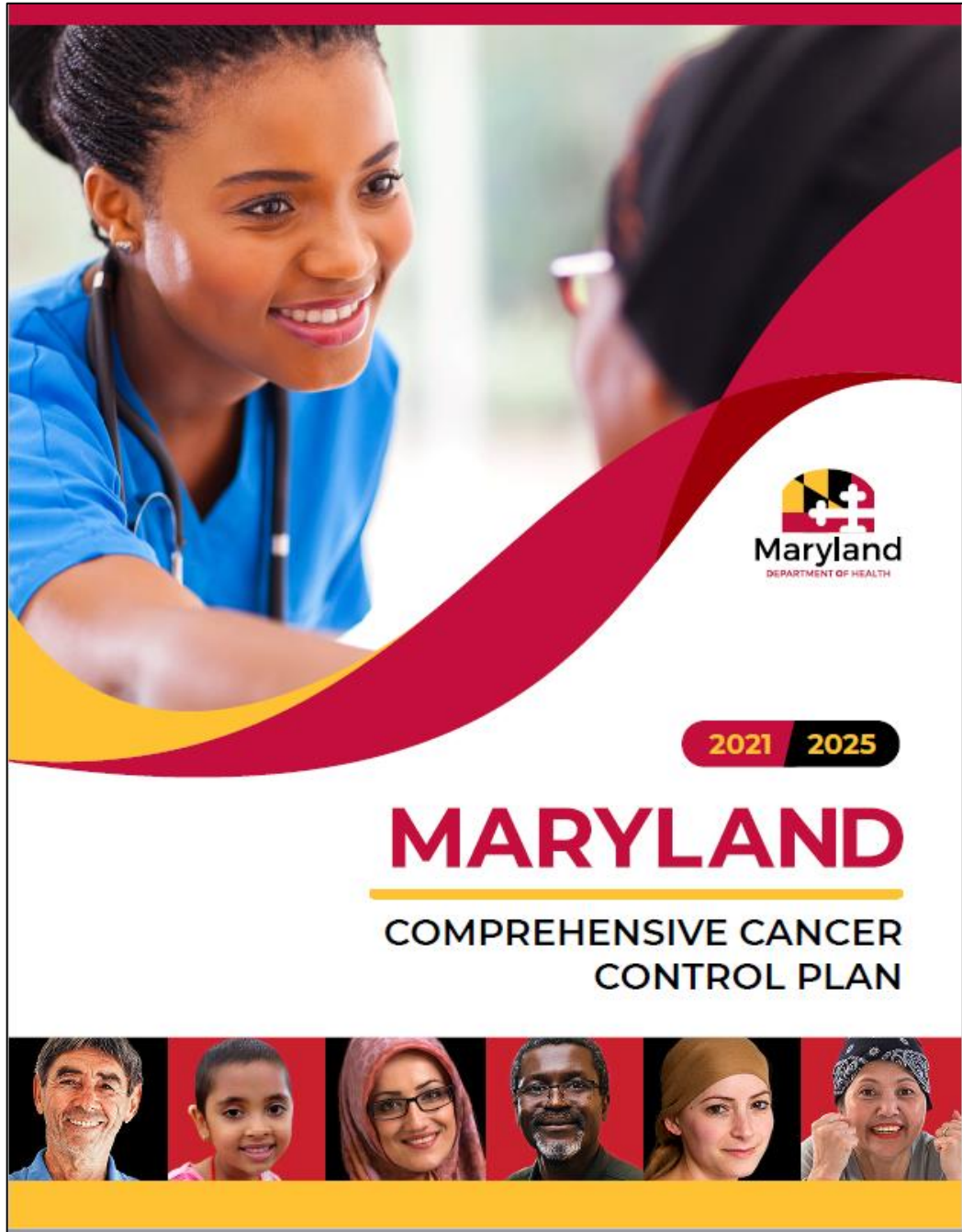


Data Source: National Cancer Institute, State Cancer Profiles



# Total Number of US Cancer Deaths Averted From 1991 to 2017





2021 2025

# MARYLAND

COMPREHENSIVE CANCER  
CONTROL PLAN





## TABLE OF CONTENTS

---

<b>6</b>	<b>ACKNOWLEDGMENTS</b>	<b>64</b>	<b>SECTION 2: HIGH BURDEN CANCERS IN MARYLAND</b>
<b>7</b>	<b>CONTRIBUTORS</b>	65	Priority Cancers in Maryland
<b>11</b>	<b>MARYLAND CANCER COLLABORATIVE</b>	79	Childhood Cancer
<b>12</b>	<b>MARYLAND COMPREHENSIVE CANCER CONTROL PLAN</b>	81	Cross-Cutting Topics
16	Key Terms and Acronyms Used in the Cancer Plan	82	<i>Patient Navigation</i>
20	Surveillance and Cancer Data Used in the Cancer Plan	83	<i>Patient-Level Education</i>
22	Special Topics in Cancer Control	84	<i>Health Care Provider Education</i>
22	<i>Access to Health Care</i>	85	<i>Quality Monitoring and Improvement</i>
24	<i>Cancer Disparities</i>	87	<i>Cancer Genetics</i>
<b>31</b>	<b>SECTION 1: PRIMARY PREVENTION OF CANCER</b>	92	<i>Immunotherapy</i>
32	Tobacco Use	93	<i>Personalized Medicine</i>
38	Healthy Weight, Nutrition, and Physical Activity	93	<i>Research and Clinical Trials</i>
41	Alcohol Consumption	96	Goals, Objectives, and Strategies
41	Infections and Cancer Prevention Vaccines	<b>102</b>	<b>SECTION 3: CANCER SURVIVORSHIP, PALLIATIVE CARE, AND HOSPICE CARE</b>
45	Family History of Cancer	104	Survivorship
45	Cancer Chemoprevention for High-Risk Populations	111	Palliative Care
45	Ultraviolet Radiation Exposure	113	Hospice Care
48	Environmental/Occupational Issues and Cancer	114	Goals, Objectives, and Strategies
54	Goals, Objectives, and Strategies	<b>119</b>	<b>APPENDICES</b>
		119	Sources of Maryland Data
		120	Sources of National Data
		121	Data Considerations

# Who Should Use the Cancer Plan?

- Health care providers
- Public health professionals
- Academics
- Representatives of community, nonprofit, and advocacy organizations
- Volunteers and others

**The goals, objectives, and strategies can be tailored to many settings to help guide cancer control activities.**



*Geographic location*

In Baltimore City, an urban, densely populated region, the cancer mortality rate is 33% higher than other parts of the state.<sup>20</sup> Similarly, much of Maryland's rural population also suffers from cancer mortality rates that are higher than the state average.<sup>21</sup> There are likely many underlying differences between geographic areas that lead to disparities in cancer rates, such as the prevalence of poverty in these areas.

*Health insurance coverage*

A higher proportion of Marylanders with health insurance report being up to date with recommended screenings for colorectal, breast, and cervical cancer compared to those without health insurance.<sup>22</sup>

**Populations of Concern for Cancer Disparities**

In the past, the subject of racial disparities has focused on racial/ethnic differences in outcome—especially Black-White disparities. There is differential access to health promotion, disease prevention, early detection, and high-quality medical treatment by race, resulting in poorer outcomes.

There is increasing understanding that other groups are also medically underserved and suffer poorer outcomes. Unfortunately, existing databases do not demonstrate these disparities as clearly. Rural Marylanders have greater difficulty accessing health care, both preventive and therapeutic, most often due to distances that must be traveled to see a health care provider. Some of this disparity is also driven by socioeconomic deprivation and issues with cost and affordability of health care.<sup>23</sup>

The lesbian, gay, bisexual, transsexual, queer and questioning (LGBTQ) community, also referred to as sexual minorities, is another group that is medically underserved and suffers disparities in health outcomes.<sup>24</sup> Sexual minorities represent between 3 to 12% of the adult U.S. population.<sup>25</sup> They span all races, ethnicities, ages, socioeconomic statuses, and regions of the United States.

There is insufficient data on sexual minorities in national databases and registries recognized by HP 2020.<sup>26</sup> Sexual minorities, however, do appear to have a higher prevalence of smoking, alcohol use, and obesity. These are factors that increase risk of cancer and are areas in which public health and health care providers might focus. Pregnancy reduces the risk of breast cancer, and there are some data to suggest that lesbians are at higher risk of breast cancer due to a higher likelihood of having never given birth.<sup>27</sup>

INTRODUCTION | Page 28

# What Can You Do?

## Implement!

- Plan encourages collaboration among stakeholders
- Goals, objectives, and strategies are far-reaching and complex, and no single organization can carry out all these activities

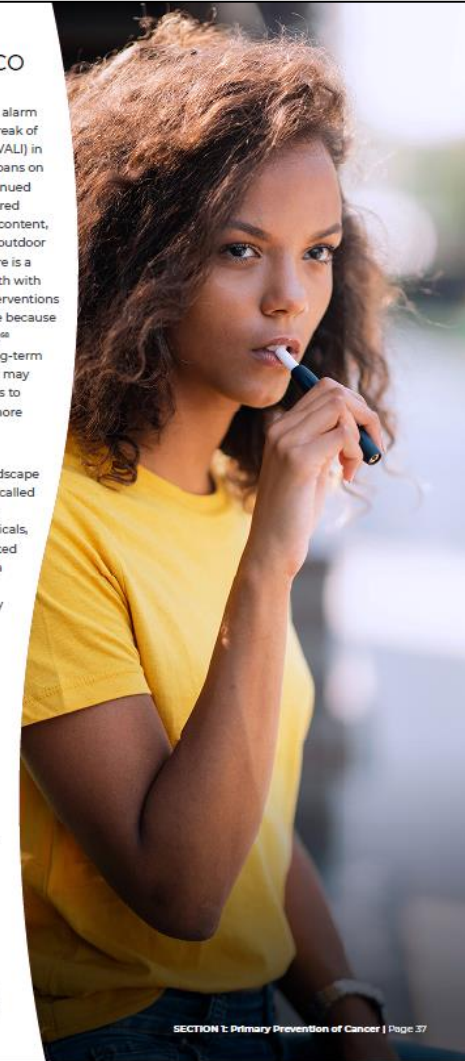
### FUTURE TOPICS IN TOBACCO CONTROL

Increased levels of ESD use by youth continue to alarm public health officials, particularly with the outbreak of e-cigarette and vaping-associated lung injury (EVALI) in 2019. Several states responded with emergency bans on flavored ESDs and other tobacco products. Continued attention must be focused on availability of flavored products, disclosure of ingredients and nicotine content, marketing and promotion, cost, and indoor and outdoor locations that permit use of ESDs. Moreover, there is a gap in research regarding methods to assist youth with quitting ESD use. Counseling and behavioral interventions are recommended for youth addicted to nicotine because NRT is not approved for individuals under age 18.<sup>48</sup> Surveillance and research into the short- and long-term health effects of vaping products is ongoing and may inform future policy and programmatic initiatives to assist youth with quitting ESDs and to prevent more youth from becoming addicted to nicotine.

Also important to the future tobacco control landscape is the emergence of a new category of products called heat-not-burn devices. Like ESDs, these devices produce an aerosol that contains nicotine, chemicals, additives, and flavorings; however, this is generated by heating tobacco, not liquid nicotine. Although the FDA granted marketing authority for the IQOS brand of heat-not-burn devices, the agency emphasized this does not equate with FDA approval and there is no safe tobacco product.

Finally, achieving equity in tobacco prevention and control is a state and national priority. Equity can be achieved by focusing efforts on decreasing the prevalence of tobacco use and secondhand smoke exposure and improving access to tobacco control resources among populations experiencing racial and ethnic disparities and those with greater tobacco-related health and economic burdens, including behavioral health conditions and disabilities, the LGBTQ community, those with lower socioeconomic status, and others.<sup>49</sup>

Other burning organic materials such as marijuana exists. Currently, there are no evidence-based guidelines for measuring marijuana use. As marijuana use increases with law changes, this needs to be evaluated further.



# Local Health Departments and Community Organizations

- Use Cancer Plan as a guide when selecting and planning cancer control initiatives and research efforts.
- Promote wellness initiatives and events that promote preventive behaviors and offer early detection opportunities.
- Advocate for policies, programs, and funding that support cancer control.
- Share resources that are available to support cancer survivors.

# Health Care Providers

- Be aware of the comprehensive cancer control planning efforts in Maryland.
- Educate patients about preventive behaviors, early detection, clinical trials, and survivorship resources.
- Participate in community cancer control efforts and work toward the elimination of disparities in underserved populations.
- Report cancer cases, as directed by Maryland law, to the Maryland Cancer Registry.
- Advocate for policies that support cancer control.

# Academic and Other Cancer Researchers

- Use the Cancer Plan as a guide when selecting and planning cancer control research efforts.
- Distribute research findings, for which support is sufficient, widely to other cancer control stakeholders in Maryland.
- Share resources that are available to support cancer survivors



# Individuals and Families

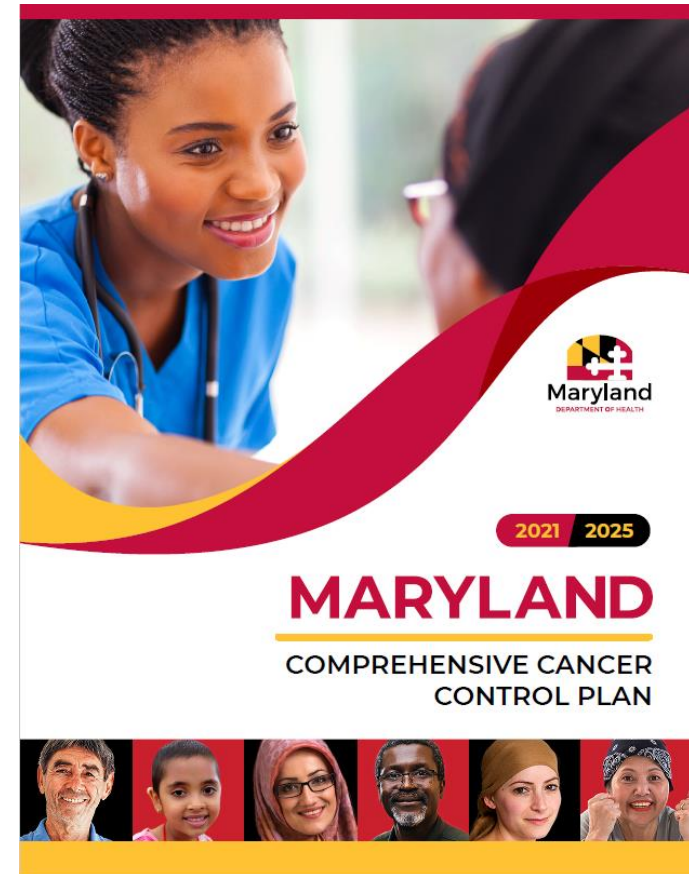
- Educate yourself and read the Cancer Plan!.
- Take action to reduce your risk of getting cancer.
- Talk to your health care provider about cancer screenings.
- Support cancer-related organizations and efforts in the community.
- Advocate for policies that support cancer control.
- Share and take advantage of resources that are available to support cancer survivors.



- Several workgroups that meet regularly to implement the Cancer Plan
- In the first quarter of next year, MCC will meet to select strategies from the Cancer Plan
- If you are not already a member, please consider joining
  - Google Maryland Cancer Collaborative and membership form can be found at bottom of page.
  - Workgroups: Tobacco Cessation; HPV-Cancer Awareness; Communications-Lesser Known Cancer Risk Factors; High-Risk Population Targeted Outreach; Cancer Survivorship education

# How Can I Get the Cancer Plan?

- Around January 1, Cancer Plan will be released and posted online
- Stakeholders will be contacted via email with link to plan.



# Questions?

Contact: [nkhanna@som.umaryland.edu](mailto:nkhanna@som.umaryland.edu)  
[brian.mattingly@maryland.gov](mailto:brian.mattingly@maryland.gov)