



**SITE-SPECIFIC
PREVENTION
AND
EARLY
DETECTION
OF CANCER**

The term primary prevention refers to public health strategies to prevent or reduce the occurrence of disease (e.g., cancer incidence) among individuals who are at risk of developing the disease. Examples of primary prevention in cancer control are smoking prevention and cessation, dietary changes, increased physical activity, and reducing exposure to ultraviolet radiation.¹

A complementary strategy to primary prevention is the early detection of cancer through screening, known as secondary prevention. Screening refers to the early detection of cancer or pre-cancerous changes in individuals who do not exhibit signs or symptoms suggestive of the disease. The intuitive logic behind screening is that detection of cancer before symptoms develop allows the diagnosis of cancer at an earlier stage when treatment may improve health outcomes. This reasoning is supported by scientific evidence for some cancers. For example, studies demonstrate that screening for colorectal, breast, and cervical cancers significantly reduces mortality due to these cancers. For other cancer sites, the evidence is less certain. For example, it is not clear yet whether screening for prostate cancer reduces mortality.²

There are potential benefits and harms of both screening for and treatment of cancer. For example, reduced mortality from cancer is one of the major benefits of screening and treatment. Harms of screening could include false-positive results of screening tests that could then lead to unnecessary biopsies, side effects, anxiety, and costs. Treatment can also lead to harms including the side effects of cancer treatments such as chemotherapy. Achieving a balance of the potential benefits and harms of screening and treatment is desirable.³

The next five chapters focus on individual cancer sites: colorectal, breast, prostate, oral, and cervical cancers. These cancers, along with cancers of the lung and skin (in Chapters 5 and 7) are highlighted in this plan based on the capacity for prevention (lung and skin cancers), early detection and treatment (colorectal, breast, cervical, and oral cancers) or impact on incidence and mortality (prostate cancer). Each chapter describes the burden of the particular cancer in Maryland, what is known about primary and secondary prevention for each cancer, and current efforts in Maryland. In addition, each chapter discusses gaps and barriers to care and recommends goals, objectives, and strategies to reduce the burden of each cancer in Maryland.

1 Brownson R, Remington R, Davis J, eds. Chronic disease epidemiology and control. American Public Health Association; 1998.

2 National Cancer Policy Board, Institute of Medicine. Fulfilling the potential of cancer prevention and early detection. 2003.

3 National Cancer Policy Board, Institute of Medicine. Fulfilling the potential of cancer prevention and early detection. 2003.