

## Appendix A: Data Terms, Sources, and Considerations

### Data Terms

#### Age-Adjustment

Age is the most important risk factor for the incidence of most cancers. Cancer rates derived from populations that differ in underlying age structure are not comparable. Therefore, age-adjustment is a statistical technique that allows for the comparison of rates among populations having different age distributions by weighting the age-specific rates in each population to one standard population.

#### Incidence rate

An incidence rate is the number of new cases of a given cancer or other event per 100,000 population during a defined time period, usually one year. Cancer incidence rates in this plan are reported for one year, such as for 1999, or as the average annual incidence rate for several aggregated years, usually 1995 through 1999.

#### Mortality rate

A mortality rate is the number of deaths per 100,000 population during a defined time period, usually one year. Cancer mortality data in this plan are reported for one year, such as for 1999, or as the average annual rate for several aggregated years, usually 1995 through 1999.

#### Rate

A rate is an estimate of the burden of a given disease on a defined population in a specified period of time. A crude rate is calculated by dividing the number of cases (events) by the population at risk during a given time period. Cancer incidence and mortality rates are usually presented per 100,000 population during a defined time period. All rates in this plan are either age-adjusted using the method described above or are age-specific.

#### Stage at Diagnosis

The extent to which a cancer has spread from the organ of origin at the time of diagnosis is its stage. The stage information used in this plan is based on the SEER Summary

Stage Guidelines:

1. In situ: The cancerous cells have not invaded the tissue basement membranes. In situ cancers are not considered malignant (with the exception of bladder cancers) and are not included in incidence rate calculations.
2. Localized: The tumor is confined to the organ of origin.
3. Regional: The tumor has spread to adjacent organs or tissue. Regional lymph nodes may also be involved.
4. Distant: The tumor has spread beyond the adjacent organs or tissues. Distant lymph nodes, organs, and/or tissues may also be involved.
5. Unstaged: The stage of disease at diagnosis was unable to be classified or was not reported to the Maryland Cancer Registry.

#### Survival Rate

A survival rate refers to the percentage of people in a study or treatment group who are alive for a given period of time after diagnosis. This plan generally presents five-year survival rates.

### Maryland Data Sources

The Maryland-specific data used in this plan were supplied by the Maryland Department of Health & Mental Hygiene (DHMH), including the Maryland Cancer Registry, the Division of Health Statistics, the Office of Injury Prevention and Health Assessment, the Center for Health Promotion, Education, and Tobacco-Use Prevention, and the Center for Cancer Surveillance and Control.

#### Maryland Cancer Registry

The Maryland Cancer Registry (MCR), Center for Cancer Surveillance and Control, DHMH, is a computerized data system that registers all new cases of reportable cancers (excluding non-genital squamous cell or basal cell carcinoma) diagnosed or treated in Maryland. The Maryland cancer reporting law mandates the collection of cancer information from hospitals, radiation therapy centers, diagnostic laboratories (both in-state and out-of-state), freestanding ambulatory care facilities, surgical centers, and physicians whose non-hospitalized cancer patients are not otherwise reported. The MCR also participates in data exchange agreements with neighboring states including Delaware, Pennsylvania, Virginia, and West Virginia and the District of Columbia. Information on Maryland residents diagnosed or treated for cancer in these states is included in this plan. The MCR achieved the “gold” certification for high quality 1999 incidence data from the North American Association of Central Cancer Registries (NAACCR) certification program. The MCR data were evaluated using the following criteria: data completeness, data quality, and timeliness.

### **Maryland Division of Health Statistics**

This office in the Vital Statistics Administration of the DHMH registers births, deaths, marriages, and divorces. Data provided from this office include numbers of deaths and Maryland population estimates. The MCR used these data to calculate cancer mortality rates.

### **Maryland Behavioral Risk Factor Surveillance System**

The Maryland Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey conducted on a random sample of Maryland adult residents. This survey, managed by the Maryland DHMH Office of Injury Prevention and Health Assessment, provided cancer screening and behavioral risk factor information for this plan. Maryland data can be accessed online at <http://www.marylandbrfss.org>. In addition, both Maryland and state-aggregated national data on health risk behaviors can be obtained from the CDC website at <http://www.cdc.gov/brfss>.

### **Maryland Youth Tobacco Survey and Maryland Adult Tobacco Survey**

The Maryland Youth Tobacco Survey (MYTS) and the Maryland Adult Tobacco Survey (MATS) are administered biennially for the purpose of gathering attitude, usage, and exposure information regarding tobacco products for each of the 23 counties and Baltimore City in Maryland. Survey results are also used in apportioning local tobacco-use prevention and cessation grants among Maryland's 24 major political subdivisions.

The most recent surveys were conducted in the fall of 2002. Over 66,000 students in eligible Maryland public middle and high schools completed MYTS survey questionnaires statewide. At the same time, approximately 25,000 Maryland adults aged 18 or older participated in a computer-assisted telephone survey.

Both the MYTS and the MATS surveys are managed by the Center for Health Promotion, Education, and Tobacco-Use Prevention. Complete data are published for the MYTS and MATS on September 1st in the year following survey administration. Copies of published reports are available from the Center (call 410-767-1362). Reports are also available online at <http://www.fha.state.md.us/crfp/html/stats.cfm>.

### **Maryland Cancer Survey (MCS)**

The Maryland Cancer Survey (MCS) is managed by the DHMH Center for Cancer Surveillance and Control. The pur-

pose of the MCS survey is to determine cancer screening rates and to measure cancer risk behaviors among persons aged 40 and older living in Maryland, for selected cancers targeted by DHMH. The methodology used in the MCS is similar to the BRFSS; however, unlike the BRFSS, the MCS focuses on the age group with people aged 40 and older, who have the highest risk of developing cancer.

## **National Data Sources**

National statistics cited in this plan were obtained from the federal Centers for Disease Control and Prevention (CDC), the Office of Disease Prevention and Health Promotion (part of the U.S. Department of Health and Human Services), the National Center for Health Statistics (NCHS), and the National Cancer Institute (NCI).

### **Surveillance, Epidemiology, and End Results Program (SEER)/ National Center for Health Statistics**

The Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute is an authoritative source of information on cancer incidence, stage, and survival in the United States. Staff at the National Cancer Institute manage SEER and assemble and report estimates of cancer incidence, survival, and mortality in the United States. The data are collected from 11 cancer registries throughout the United States and are estimated to represent approximately 14% of the U.S. population. The SEER database provides cancer incidence with regard to race, ethnicity, age, sex, poverty, and education, and by collecting data on epidemiologically significant population subgroups. The SEER program began in 1973 and was expanded in 1992 to increase coverage of minority populations, primarily Hispanics. The mortality data reported by SEER are provided by the National Center for Health Statistics. The SEER program updates cancer statistics annually in a publication called the SEER Cancer Statistics Review (CSR). SEER data for specific cancer sites can be accessed on the web at [http://www.seer.cancer.gov/csr/1973\\_1999/sections.html#sections](http://www.seer.cancer.gov/csr/1973_1999/sections.html#sections).

Further information about SEER can be found at <http://www.seer.cancer.gov/>.

### **Healthy People 2010**

Healthy People 2010 is a compilation of national health objec-

tives that have been developed by a collaboration of local and national governmental agencies and private organizations to improve the health of Americans. There are 28 focus areas and 467 specific objectives in Healthy People 2010. The Healthy People initiative is supported by the Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services. The Healthy People 2010 objectives are now being tracked using a year 2000 baseline. Further information about Healthy People 2010 can be found at <http://www.health.gov/healthypeople>.

#### **CDC Behavioral Risk Factor Surveillance System**

The national counterpart to Maryland's BRFSS system is operated by the CDC's National Center for Chronic Disease Prevention and Health Promotion. National statistics on behavioral health risks, as well as select individual state data may be accessed at <http://www.cdc.gov/brfss>.

#### **National Cancer Institute Physician Data Query (PDQ)**

This source provides information for health professionals and the public on various aspects of cancer control such as prevention, screening, treatment, genetics, and clinical trials. The information is reviewed by a scientific editorial board and is updated as new research becomes available. Each statement listed in the PDQ is based on current knowledge as defined by the most recent literature using established levels of evidence. More information about NCI's PDQ can be accessed at <http://www.nci.nih.gov/cancerinfo/pdq/cancerdatabase>.

#### **SAMMEC: Smoking-Attributable Mortality, Morbidity, and Economic Costs**

The CDC manages the Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) application to estimate the disease impact of smoking for the nation, states, and large populations. The SAMMEC application is primarily used to measure the deaths and years of life lost due to smoking, but it can also calculate smoking-attributable mortality (SAM), years of potential life lost (YPLL), direct medical expenditures, and productivity costs. More information and SAMMEC data can be accessed at <http://apps.nccd.cdc.gov/samme/intro.asp>.

## **Data Considerations**

### **Data Confidentiality**

The Maryland DHMH regards all data received, processed, and reported to and by the Maryland Cancer Registry and the Division of Health Statistics as confidential. Data are secured from unauthorized access and disclosure.

The Maryland Cancer Registry manages and releases cancer information in accordance with the laws, rules, and regulations established for and by the state of Maryland as set forth in the Code of Maryland Regulations, COMAR 10.14.01 (Cancer Registry) and Health-General Article §§ 18–203 and 18–204, from the Annotated Code of Maryland.

In order to ensure patient confidentiality and to comply with the Maryland Cancer Registry Data Use Policy, cells with five or fewer cases are presented with “<6.” Cell counts that could be used to calculate the number of cases within a restricted cell are suppressed.

### **Sex**

Sex is now reported to the Maryland Cancer Registry as (a) male, (b) female, (c) hermaphrodite, (d) transsexual, and (e) unknown. The totals shown in the count for number of cancer cases may not equal the sum of males and females because of cases in these other sex categories.

### **Rate Analysis and the Year 2000**

#### **U.S. Population Standard**

Age-adjustment, also called age-standardization, is one of the tools used as a control for the different and changing age distributions of the population in states, counties, etc., and to enable meaningful comparisons of vital rates over time. Federal agencies have adopted the year 2000 U.S. standard population as the new standard for age-adjusting incidence and mortality rates, beginning in data year 1999. For consistency and ease of comparison, incidence and mortality rates in this plan were calculated and age-adjusted using the 2000 U.S. population as the standard population. This new standard replaces prior standards based on the 1940 or 1970 standard population for the nation.

The age structure of the U.S. population has changed considerably between 1970 and 2000, with the 2000 population having a larger proportion of older persons than the 1970 population standard. Given that age is the most important risk factor for cancer, using the year 2000 U.S. standard population

results in higher overall age-adjusted cancer incidence and mortality rates.

Because incidence and mortality rates presented in this plan have been standardized to the 2000 U.S. standard population, they may differ from rates presented for the same year in prior cancer plans and other reports. Please note that the new standard may affect trends and narrow race differentials in age-adjusted death rates. Additional information on age-adjustment can be found at <http://www.cdc.gov/nchs/data/statnt/statnt20.pdf>.

Incidence and mortality rates based on 25 or fewer cases are not presented and rates in these cells are indicated with asterisks (\*\*\*) because the rates are unstable and do not provide reliable information.

### **Confidence Intervals and Statistical Significance**

A confidence interval is a range of values within which the true rate is expected to fall. If the confidence interval of a Maryland rate includes the U.S. (SEER) rate, Maryland and the United States are considered comparable or not statistically significantly different. Statistical significance in this plan refers to comparisons of rates that were calculated at the 95% confidence level. For additional information regarding the formula used to calculate the confidence level, refer to the National Cancer Institute/SEER web site:

[http://seer.cancer.gov/seerstat/WebHelp/Rate\\_Algorithms.htm](http://seer.cancer.gov/seerstat/WebHelp/Rate_Algorithms.htm).

### **Race and Ethnicity**

The MCR began requiring submission of more detailed data on race and ethnicity beginning in August 1998. Previously, race reported as American Indian/Alaska Native or Asian/Pacific Islander was counted in the category called “other” race. For many of the chapters of this plan, race and ethnicity reporting is limited to blacks and whites, though in some cases an “other” category is presented. However, for Chapter 3 on cancer disparities, an effort was made to provide as much race/ethnicity detail as possible for the Maryland population. In this chapter, mortality rates are presented by race for the years 1995–1999, though rates for Asian/Pacific Islanders, American Indian/Alaska Native, and Hispanic ethnicity may not be available due to 25 or fewer cases in a category. Cancer incidence data for Asian/Pacific Islanders and American Indian/Alaska Native is limited to years 1998–1999, and data for Hispanic ethnicity is limited to year 1999. Again, some rates may not be

available due to 25 or fewer cases in a category.

Hispanic ethnicity data is derived from two sources using Maryland data from the MCR. The first method examines the ethnicity variable as recorded in the MCR that is obtained through chart abstraction/documentation from the reporting source. The second method estimates Hispanic ethnicity by using an established algorithm. This algorithm estimates Hispanic ethnicity via analysis of a person’s surname, maiden name, birthplace, and racial coding.

### **Healthy People 2010 Objectives, Maryland BRFSS, and MCS**

As measures for cancer-related behaviors (e.g., screening tests) and the recommendations for their use change, the Behavioral Risk Factor Surveillance System (BRFSS) and Maryland Cancer Survey (MCS) questions that measure screening and other health behaviors are also updated to reflect these modifications. In addition, the Healthy People 2010 objectives may change to reflect new health-related behavior and screening recommendations over time. Healthy People 2010 objectives are generally age-adjusted to the year 2000 U.S. standard population, while data from the Maryland BRFSS and MCS is weighted to the age of the Maryland population in that year, but not age-adjusted to the year 2000 U.S. standard population.

### **Targets for Change**

The mortality targets contained in this plan were developed using the estimated annual percentage change (EAPC). EAPC is a measure of the annual percent increase or decrease in cancer rates over time. It is an estimated average change per year over a defined time span.

### **Data Years**

Significant efforts were made toward consistency of data years reported in this plan. Age-adjusted incidence and mortality statistics are reported through 1999, the most recent data year available at the time of writing.

Behavioral risk factor data from the BRFSS, the MCS, and the MYTS/MATS are reported for the most recent year available at the time of writing, or for several different years in order to establish a trend over time. The most recent data year available for behavioral risk factor data varies from topic to topic, based on which survey questions were asked in various years.

## Appendix B: Evidence-Based Effective Interventions

Several organizations perform evidence-based reviews of clinical and community interventions. Two of these organizations are: the U.S. Preventive Services Task Force and the Task Force on Community Preventive Services.

The U.S. Preventive Services Task Force (USPSTF) is an independent panel of experts in primary care and prevention that is convened by the U.S. Public Health Service to systematically review the evidence of effectiveness of, and develop recommendations for, clinical preventive services. The USPSTF published the 1989 and 1996 *Guide to Clinical Preventive Services*. Currently, the USPSTF is updating assessments and recommendations and addressing new topics. The Agency for Healthcare Research and Quality (AHRQ) oversees the operation of the USPSTF. The USPSTF is supported by two AHRQ Evidence-based Practice Centers: the Oregon Health and Science University and the Research Triangle Institute. The USPSTF grades its recommendations according to one of five classifications: Strongly Recommends with Good Evidence; Recommends with Fair Evidence; No Recommendation for or against an Intervention; Recommends against an Intervention; and Evidence is Insufficient to Recommend for or against an Intervention.

The Task Force on Community Preventive Services, with the support of the Centers for Disease Control and Prevention, the National Cancer Institute, and experts in the public and private sector, is in the process of conducting a systematic review of available evidence of effectiveness for selected interventions in three areas: (1) improving health behaviors, (2) reducing the burden of disease and disabilities, and (3) addressing environmental challenges. The reviews are being conducted as part of the Guide to Community Preventive Services, which summarizes the published evidence on the effectiveness of select community-based interventions across a range of public health topics. After completion of the reviews, the Task Force issues one of four findings: Recommended Based on Strong Evidence; Recommended Based on Sufficient Evidence; Insufficient Evidence to Determine Effectiveness; and Not Recommended.

The recommendations of these organizations are based on the strength of the body of evidence of effectiveness of the intervention. This strength is determined by the number of studies with suitable study designs and acceptable quality of execution. A finding of “Insufficient Evidence to Determine Effectiveness” does not mean evidence of ineffectiveness.

Rather, this finding means that there is uncertainty about the effectiveness of the intervention and that this is an area of continued research needs.

The following tables represent the reviews of these two organizations with respect to some of the cancer topics covered in this plan. It is recommended that strategies implemented as a result of this plan be based on the strength of the evidence of effectiveness of each intervention.

**Table B.1**  
**Evidence-Based Effectiveness of Select Cancer Control Interventions**

Cancer Site / Intervention	Evidence-Based Effectiveness of Intervention			
	Strongly Recommended	Recommended	Insufficient Evidence	Not Recommended
<b>Tobacco:</b> Tobacco-Use Prevention and Cessation (2)	X			
<b>Colorectal Cancer:</b> Screening men and women 50 years of age and older for colorectal cancer (1)	X			
<b>Breast Cancer:</b> Screening mammography, with or without clinical breast examination (CBE), every 1-2 years for women aged 40 and older (1)		X		
<b>Prostate Cancer:</b> Screening for prostate cancer using PSA testing or digital rectal examination (1)			X	
<b>Cervical Cancer:</b> Screening for cervical cancer in women who have been sexually active and have a cervix (1)	X			
<b>Oral Cancer:</b> Screening of asymptomatic persons for oral cancer by primary care clinicians (1)			X	
<b>Skin Cancer:</b> Screening for skin cancer using a total body skin examination (1)			X	
<b>Bladder Cancer:</b> Screening for bladder cancer with urine dipstick, microscopic urinalysis, or urine cytology in asymptomatic persons (1)				X
<b>Ovarian Cancer:</b> Screening for ovarian cancer by ultrasound, serum tumor markers, or pelvic examination (1)				X

Sources: (1) U.S. Preventive Services Task Force, accessed at [www.preventiveservices.ahrq.gov/](http://www.preventiveservices.ahrq.gov/) and (2) Guide to Community Preventive Services, Systematic Reviews, and Evidence-based Recommendations, accessed at [www.thecommunityguide.org](http://www.thecommunityguide.org).

**Table B.2**  
**Lung Cancer / Tobacco-Use Prevention and Cessation: Evidence-Based Effectiveness of Interventions**

Cancer Site / Intervention	Evidence-Based Effectiveness of Intervention			
	Strongly Recommended	Recommended	Insufficient Evidence	Not Recommended
Screening for lung cancer with chest radiography or sputum cytology in asymptomatic persons (1)				X
<b>Reducing exposure to environmental tobacco smoke:</b>				
Smoking bans and restrictions (2)	X			
Community education (2)			X	
<b>Preventing tobacco product use initiation:</b>				
Increasing the unit price for tobacco products (2)	X			
Mass media campaigns with interventions (2)	X			
<b>Increasing cessation:</b>				
Increasing the unit price for tobacco products (2)	X			
Mass media campaigns with interventions (2)	X			
Provider reminder systems with provider education (2)	X			
Quitline telephone support with interventions (2)	X			
Provider reminder systems alone (2)		X		
Reducing patient costs for treatments (2)		X		
Tobacco cessation counseling for all persons who use tobacco products (1)		X		
Prescription of nicotine patches or gum as an adjunct for select patients (1)		X		
Smoking cessation series (2)			X	
Smoking cessation contests (2)			X	
Provider education alone (2)			X	

Sources: (1) U.S. Preventive Services Task Force, accessed at [www.preventiveservices.ahrq.gov/](http://www.preventiveservices.ahrq.gov/) and (2) Guide to Community Preventive Services, Systematic Reviews, and Evidence-based Recommendations, accessed at [www.thecommunityguide.org](http://www.thecommunityguide.org).

**Table B.3**  
**Breast Cancer: Evidence-Based Effectiveness of Interventions**

Cancer Site / Intervention	Evidence-Based Effectiveness of Intervention			
	Strongly Recommended	Recommended	Insufficient Evidence	Not Recommended
Screening mammography, with or without clinical breast examination (CBE), every 1–2 years for women aged 40 and older (1)		X		
Teaching or performing routine breast self-examination (1)			X	
<b>Health care system-oriented interventions to promote screening:</b>				
Client reminders to promote breast cancer screening (2)	X			
Incentive programs for clients, in conjunction with reminders, to promote breast cancer screening (2)		X		
<b>Community-oriented interventions to promote screening:</b>				
One-on-one education to promote breast cancer screening (2)		X		
Mass media campaigns to promote breast cancer screening (2)		X		
Small media education for breast cancer screening (eg., brochure, flyers, newsletters, informational letters, videos) (2)		X		
Small group education to promote breast cancer screening (2)			X	

Sources: (1) U.S. Preventive Services Task Force, accessed at [www.preventiveservices.ahrq.gov/](http://www.preventiveservices.ahrq.gov/) and (2) Guide to Community Preventive Services, Systematic Reviews, and Evidence-based Recommendations, accessed at [www.thecommunityguide.org](http://www.thecommunityguide.org).

**Table B.4**  
**Cervical Cancer: Evidence-Based Effectiveness of Interventions**

Cancer Site / Intervention	Evidence-Based Effectiveness of Intervention			
	Strongly Recommended	Recommended	Insufficient Evidence	Not Recommended
Screening for cervical cancer (Pap test) in women who have been sexually active and have a cervix (1)	X			
Use of new technologies to screen for cervical cancer (1)			X	
Use of HPV testing as a primary screening test for cervical cancer (1)			X	
<b>Health care system-oriented interventions to promote cervical cancer screening:</b>				
Client reminders to promote cervical cancer screening (2)	X			
Incentive programs for clients, in conjunction with reminders, to promote cervical cancer screening (2)		X		
<b>Community-oriented interventions:</b>				
Mass media campaigns to promote cervical cancer screening (2)		X		

Sources: (1) U.S. Preventive Services Task Force, accessed at [www.preventiveservices.ahrq.gov/](http://www.preventiveservices.ahrq.gov/) and (2) Guide to Community Preventive Services, Systematic Reviews, and Evidence-based Recommendations, accessed at [www.thecommunityguide.org](http://www.thecommunityguide.org).

**Table B.5**  
**Skin Cancer: Evidence-Based Effectiveness of Interventions**

Cancer Site / Intervention	Evidence-Based Effectiveness of Intervention			
	Strongly Recommended	Recommended	Insufficient Evidence	Not Recommended
Screening for skin cancer using a total body skin examination (1)			X	
Educational/policy interventions in primary schools in improving children's sun protective "covering-up" behavior (2)		X		
Educational/policy interventions in recreation/tourism settings in improving <i>adult</i> sun-protective behaviors (2)		X		
Educational/policy interventions in recreation/tourism settings in improving <i>children's</i> sun-protective behaviors (2)			X	
Mass media campaigns to promote interventions (2)			X	
Community-wide multi-component interventions (2)			X	
Interventions with children's parents or caregivers (2)			X	
Educational/policy interventions in child-care centers, secondary schools, health care settings, occupational settings (2)			X	

Sources: (1) U.S. Preventive Services Task Force, accessed at [www.preventiveservices.ahrq.gov/](http://www.preventiveservices.ahrq.gov/) and (2) Guide to Community Preventive Services, Systematic Reviews, and Evidence-based Recommendations, accessed at [www.thecommunityguide.org](http://www.thecommunityguide.org).

**Table B.6**  
**Physical Activity: Evidence-Based Effectiveness of Interventions**

Cancer Site / Intervention	Evidence-Based Effectiveness of Intervention			
	Strongly Recommended	Recommended	Insufficient Evidence	Not Recommended
Behavioral counseling in primary care settings to promote physical activity (1)			X	
<b>Informational approaches:</b>				
Community-wide campaigns (2)	X			
School-based physical education (2)	X			
Non-family social support (2)	X			
Point-of-decision prompts (2)		X		
Mass media campaigns to promote activity (2)			X	
Classroom-based health education focused on information provision (2)			X	
<b>Behavioral and social approaches:</b>				
Individually adapted health behavior change (2)	X			
College-age physical education / health education (2)			X	
<b>Environmental and policy approaches to increasing physical activity:</b>				
Creation and/or enhanced access to places for physical activity combined with informational outreach activities (2)	X			

Sources: (1) U.S. Preventive Services Task Force, accessed at [www.preventiveservices.ahrq.gov/](http://www.preventiveservices.ahrq.gov/) and (2) Guide to Community Preventive Services, Systematic Reviews, and Evidence-based Recommendations, accessed at [www.thecommunityguide.org](http://www.thecommunityguide.org).

**Table B.7**  
**Healthy Diet: Evidence-Based Effectiveness of Interventions**

Cancer Site / Intervention	Evidence-Based Effectiveness of Intervention			
	Strongly Recommended	Recommended	Insufficient Evidence	Not Recommended
Behavioral counseling to promote a healthy diet in unselected patients in primary care settings (1)			X	
Use of supplements of vitamins A, C, or E; multivitamins with folic acid; or antioxidant combinations for the prevention of cancer or CVD (1)			X	
Use of beta-carotene supplements, either alone or in combination, for the prevention of cancer or CVD (1)				X
Multi-component interventions in school-based settings to increase vegetable and fruit consumption (e.g., increasing availability, attractiveness, variety; classroom activities; goal setting; taste testing and cooking activities (2)		X		

Sources: (1) U.S. Preventive Services Task Force, accessed at [www.preventiveservices.ahrq.gov/](http://www.preventiveservices.ahrq.gov/) and (2) Guide to Community Preventive Services, Systematic Reviews, and Evidence-based Recommendations, accessed at [www.thecommunityguide.org](http://www.thecommunityguide.org).

**Table B.8**  
**Oral Cancer: Evidence-Based Effectiveness of Interventions**

Cancer Site / Intervention	Evidence-Based Effectiveness of Intervention			
	Strongly Recommended	Recommended	Insufficient Evidence	Not Recommended
Screening of asymptomatic persons for oral cancer by primary care clinicians (1)			X	
Counseling patients to discontinue use of tobacco products and limit consumption of alcohol (1)		X		
Population-based interventions for early detection (2)			X	

Sources: (1) U.S. Preventive Services Task Force, accessed at [www.preventiveservices.ahrq.gov/](http://www.preventiveservices.ahrq.gov/) and (2) Guide to Community Preventive Services, Systematic Reviews, and Evidence-based Recommendations, accessed at [www.thecommunityguide.org](http://www.thecommunityguide.org).

**Table B.9**  
**Disparities/Cultural Competency in the Health Care System:  
 Evidence-Based Effectiveness of Interventions**

Cancer Site / Intervention	Evidence-Based Effectiveness of Intervention			
	Strongly Recommended	Recommended	Insufficient Evidence	Not Recommended
Use of culturally and linguistically appropriate health education materials			X	
Use of interpreter services or bilingual providers			X	
Cultural competency training for health care providers			X	
Programs to recruit and retain staff who reflect the cultural diversity of the community			X	
Culturally specific health care setting			X	

Source: Guide to Community Preventive Services, Systematic Reviews, and Evidence-based Recommendations, accessed at [www.thecommunityguide.org](http://www.thecommunityguide.org).