

# **Maryland Cancer Survey, 2006**

## **A Population-Based Statewide Survey on Cancer Screening and Behavioral Risk Factors**

**Funded by the Cigarette Restitution Fund  
Cancer Prevention, Education, Screening and Treatment Program**

**Maryland Department of Health and Mental Hygiene**

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## **Dedication**

We dedicate this report to the staff working at the Local Health Departments throughout Maryland. Without their tireless efforts to promote education about cancer screening and prevention among all Marylanders and their work to screen uninsured and low income individuals, the results highlighted in this report would not be possible.

## **Citation**

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## Maryland Cancer Survey, 2006

### Highlights

Maryland residents continue to make significant progress in increasing both awareness and utilization of cancer screening tests. Marylanders are, as a group, knowledgeable about cancer screening tests and are being tested at rates comparable to or better than the national baselines. However, our data suggest disparities in the prevalence of some screening tests based on race and other demographic factors, including age, education, employment status, and income. Other factors also have a significant influence on cancer screening prevalence in Maryland, including health insurance status, whether or not people have had a recent physical examination, and whether or not the health care provider recommends the test be done. Also, while Marylanders have been successful in meeting or exceeding several Healthy People (HP) 2010 targets related to cancer screening, they have been less successful in attaining targets for some behavioral and lifestyle goals aimed at reducing risk of cancer and other chronic diseases.

#### Comparison to HP 2010 targets

- Maryland **exceeds** the HP 2010 targets for the following cancer screening tests and cancer risk factors:
  - **Colonoscopy or sigmoidoscopy:** 69% of Marylanders age 50 years and older reported ever having at least one of these procedures, compared to the HP 2010 target of 50%.
  - **Mammogram in the past 2 years:** 83% of Maryland women age 40 years and older reported having a mammogram in the past 2 years, compared to the HP 2010 target of 70%.
  - **Pap test:** 98% of Maryland women age 40 years and older reported ever having a Pap test, compared to the HP 2010 target of 97%. (HP 2010 target based on women age 18 years and older.)
  - **Oral cancer screening:** 37% of Marylanders age 40 years and older reported having had an oral cancer screening in the past year, compared to the HP 2010 target of 20%.
- Marylanders **approach** the HP 2010 targets for the following cancer screening tests and cancer risk factors:
  - **Fecal Occult Blood Test (FOBT) in the past 2 years:** 32% of Marylanders age 50 years and older reported having a recent FOBT, compared to the HP 2010 target of 33%.
  - **Pap test in the past 3 years:** 88% of Maryland women age 40 years and older said they had a Pap test in the past 3 years, compared to the target of 90%.
  - **Smoking:** 16% of Marylanders age 40 years and older reported current cigarette use, compared to target of 12%.
  - **Physical Activity:** Almost half (46%) of Marylanders age 40 years and older reported engaging in regular physical activity – either 20

minutes of vigorous activity 3 or more days per week or 30 minutes of moderate activity 5 or more days a week, compared to a target of 50%.

- Marylanders do **not** meet the 2010 targets for the following measures:
  - **Health insurance:** 94% of Marylanders age 40 years and older reported having health insurance, compared to the HP 2010 target of 100%.
  - **Fruit and vegetable consumption:** Only 27% of Marylanders age 40 years and older reported eating the recommended 3 or more servings of vegetables per day, compared to the target of 50%; only 60% reported eating 2 or more daily servings of fruit, compared to the target of 75%.
  - **Vigorous exercise:** Only 24% of Marylanders age 40 years and older reported engaging in vigorous activity 3 or more days per week for at least 20 minutes per occasion, compared to the HP 2010 target of 30%.
  - **“Healthy” body mass index:** Only 31% of Marylanders age 40 years and older were in the healthy weight category compared to the HP 2010 target of 60%.

#### Additional Comparisons

There are no HP 2010 objectives related to routine prostate cancer screening for men. However, the prevalence of prostate cancer screening among age-eligible Maryland men surveyed in the MCS 2006 compared favorably with national averages for prostate-specific antigen (PSA) testing and digital rectal exam (DRE).<sup>1</sup> In Maryland, 57% of men had a PSA or a DRE within the past year, compared with national averages of 52% for PSA testing and 50% for DRE within the past year among men age 50 years and older. (Maryland figures include African American men age 45-49 years.)

Racial differences in prevalence were found for several types of cancer screening. Among those of appropriate age for screening, African Americans were **statistically significantly less likely** than the White population to report having:

- Ever had colonoscopy or sigmoidoscopy (63% vs. 71%)
- Ever had a prostate-specific antigen (PSA) test (65% vs. 79%)
- Had a PSA test in the past year (49% vs. 61%)
- Ever had a digital rectal examination (DRE) (82% vs. 92%)
- Ever had oral cancer screening (31% vs. 53%)
- Had an oral cancer exam in the past year (21% vs. 43%)

Cancer screenings generally increased with:

- increasing age
- higher education level
- higher income level

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<sup>1</sup> American Cancer Society. Cancer Prevention and Early Detection Facts & Figures 2006. Atlanta; 2006. Available at <http://www.cancer.org/downloads/STT/CPED2006PWSecured.pdf>. Last accessed July 12, 2007.

- having health insurance
- having a primary health care provider
- having had a physical exam in the past year
- Screening rates were higher when a health care provider recommended screening
- “The doctor did not order the test” was a prominent reason for not being screened among people who had not been screened for colorectal cancer and prostate cancer

#### Comparison between MCS 2002, 2004, and 2006

- Overall, it appears that Marylanders are moving away from CRC screening by FOBT and sigmoidoscopy, in favor of colonoscopy.
  - While the percentage of Marylanders age 50 years and older who reported ever performing an FOBT has remained fairly steady, the proportion who reported having the test in the past 2 years continues to decline (44% in MCS 2002, 36% in 2004 and 32% in 2006).
  - An increasing percentage of people age 50 years and older are reporting to have ever had lower GI endoscopic exams (58% in 2002, 63% in 2004, and 69% in 2006).
- As a result of the increases in prevalence of colonoscopy, the proportion of people never tested for CRC has dropped from 26% in 2002 to 20% in 2006.
- The prevalence of up-to-date colonoscopy has increased from 41% in 2002 to 59% in 2006.
- Screening prevalence for prostate cancer (PSA or DRE), breast cancer (mammography), and cervical cancer (Pap test) did not change significantly between 2002 and 2006 surveys.
- A significant increase occurred in the prevalence of ever having oral cancer screening, rising from 43% in both 2002 and 2004 to 47% in 2006. The percent of Marylanders reporting to have had an oral cancer exam in the past year has also increased steadily over time, to a high of 37% in 2006.
- The prevalence of overweight varied little between 2004 and 2006 (38% and 39%, respectively) and the percent of obese individuals in Maryland remained steady at 29%.
- The prevalence of current cigarette smoking did not change significantly between the 2002 and 2006 surveys.

### Strengths and Limitations of the MCS 2006

- Strengths of the MCS include:
  - Population-based sample, weighted to the Maryland population, using methods similar to the national Behavioral Risk Factor Surveillance System
  - Large sample size focusing on Marylanders who were 40 years of age and older
  - Responses taken from those who spoke English or Spanish
- Limitations of the MCS include:
  - Telephone survey using only land-line numbers, not including cellular telephones
  - Only surveyed those who lived in residences and not the institutionalized population

## Chapter 1. Introduction

This document contains the results of the third Maryland Cancer Survey (MCS), conducted in 2006. The Surveillance and Evaluation Unit of the Center for Cancer Surveillance and Control, Maryland Department of Health and Mental Hygiene (DHMH) commissioned the MCS as part of an ongoing surveillance project to provide information on cancer screening rates, knowledge of cancer and cancer screening, and lifestyle factors related to cancer screening among Maryland residents age 40 years and older. The Department of Epidemiology and Preventive Medicine at the University of Maryland, Baltimore (UMB), School of Medicine conducted the survey. In addition to overall cancer screening prevalence, the MCS reports the percentage of respondents up-to-date with certain screening tests. These estimates are based on screening intervals recommended by the American Cancer Society (where available). Prevalence of ever having a particular type of cancer screening and of up-to-date screening are compared to the results obtained in the MCS 2002<sup>1</sup> and MCS 2004<sup>2</sup>; national targets established in Healthy People 2010 (HP 2010)<sup>3</sup>; and to other national estimates or baselines (e.g., the National Health Interview Survey or the Behavioral Risk Factor Surveillance System survey).

In 2000, the Maryland State Legislature established the Cigarette Restitution Fund (CRF) with monies received from the tobacco settlement, which in turn led to the establishment of the Cancer Prevention, Education, Screening, and Treatment (CPEST) Program. Under this program, the Surveillance and Evaluation Unit is charged with collecting, analyzing, and monitoring data related to the seven cancers targeted by DHMH and with measuring and evaluating the results of cancer prevention and education in Maryland. The MCS helps to meet this need by providing information on the factors associated with primary and secondary prevention of cancer.

The State of Maryland has made great headway in its fight against cancer, dropping from third highest cancer mortality rate in the nation for the time period 1986-1990 to 18<sup>th</sup> for the period 2000-2003.<sup>4</sup> Even with these improvements, over 23,000 cases of cancer (excluding non-melanoma skin cancer) were reported in 2001 and cancer remains the second leading cause of death, accounting for 24% of all deaths in Maryland.<sup>5</sup>

Gaining knowledge about the factors that are associated with cancer screening and with cancer risk behaviors will allow policies to be made and programs to be implemented which promote cancer prevention and screening among populations currently at risk. With a greater

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<sup>1</sup> Maryland Department of Health and Mental Hygiene. Report of the Maryland Cancer Survey, 2002. Baltimore, MD. Available at [http://fha.state.md.us/cancer/surveillance/html/data\\_reports.cfm](http://fha.state.md.us/cancer/surveillance/html/data_reports.cfm) Last accessed July 12, 2007.

<sup>2</sup> Maryland Department of Health and Mental Hygiene. Report of the Maryland Cancer Survey, 2004. Baltimore, MD. Available at [http://fha.state.md.us/cancer/surveillance/html/data\\_reports.cfm](http://fha.state.md.us/cancer/surveillance/html/data_reports.cfm) Last accessed July 12, 2007.

<sup>3</sup> U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. Washington, DC; U.S. Government Printing Office, November 2000. Available at <http://www.healthypeople.gov>. Last accessed July 12, 2007.

<sup>4</sup> Ries LAG et al. (eds). *SEER Cancer Statistics Review, 1975-2003*, National Cancer Institute. Bethesda, MD. Available at [http://seer.cancer.gov/csr/1975\\_2003](http://seer.cancer.gov/csr/1975_2003). Last accessed July 12, 2007.

<sup>5</sup> Maryland Department of Health and Mental Hygiene. Cancer Report 2004. Baltimore, MD; September 2004. Available at [http://fha.state.md.us/cancer/surveillance/html/data\\_reports.cfm](http://fha.state.md.us/cancer/surveillance/html/data_reports.cfm). Last accessed July 12, 2007.



emphasis on cancer prevention and screening, the age-adjusted cancer mortality rates are anticipated to decline in Maryland.

Changes made to the Maryland Cancer Survey for 2006 from previous surveys include:

- In an effort to reach a larger proportion of respondents who spoke only Spanish, participants were given the opportunity to complete the interview entirely in Spanish through use of bilingual interviewers.
- The section related to health care access was expanded.
- The section on sun prevention was excluded.
- New questions were added to ascertain participant efforts in weight control.
- New questions were added on tobacco use to provide an indication of tobacco addiction.

## **Chapter 2. Methods for Survey Design, Data Collection, and Analysis**

### Sample Design

The Maryland Cancer Survey (MCS) 2006 was conducted as a population-based, random-digit-dial, computer-assisted telephone interview (CATI), using list-assisted disproportionate stratified sampling. This method is similar to the Behavioral Risk Factor Surveillance System (BRFSS) survey conducted annually in each state and funded by the Centers for Disease Control and Prevention (CDC).<sup>1</sup> The MCS respondents were limited to persons age 40 years and older, residing in private households in the state of Maryland. People not eligible for the survey included those who were less than 40 years of age, those who were unable to communicate because of a physical or mental impairment, and those living in group homes or institutions. Potential respondents who spoke only Spanish were offered participation in Spanish by a bilingual interviewer.

Maryland was divided into two geographic strata: urban (consisting of Baltimore City and the seven counties in the Metropolitan Baltimore-Washington, DC area) and rural (consisting of the remaining 16 counties in Western and Southern Maryland and the Eastern Shore of Maryland). Genesys - Market Systems Group (MSG) provided a pool of 70,020 random telephone numbers. The rural area was oversampled, making up 40% of the telephone number pool, whereas the rural population represents only 21.5% of the Maryland population.

Each geographic stratum has two types of telephone number ‘blocks’: ‘listed one-plus’ and ‘not listed one-plus’ blocks. Each one-plus block contains 100 consecutive phone numbers, at least one of which is known to be a residential phone number. The ‘listed one-plus’ blocks contain all the listed telephone numbers from the one-plus block of numbers and is known as the high density stratum. The “not listed one-plus” blocks are the remaining one-plus numbers after the listed numbers are removed and constitute the medium density block. Not listed one-plus phone numbers were sampled at two-thirds the rate of the listed one-plus telephone numbers.

### MCS 2006 Questionnaire

The MCS 2006 questionnaire was based on the MCS 2002 and 2004 questionnaires, with validated questions from national and state surveys such as the BRFSS, the National Health Interview Survey (NHIS), the National Health and Nutrition Examination Survey (NHANES) and the Department of Health and Mental Hygiene (DHMH) Oral Health Survey, as well as some questions newly developed for MCS. Using these questionnaires as the basis for the 2006 survey, staff from DHMH and the University of Maryland, Baltimore (UMB) revised, added, and deleted some questions. While the majority of questions remained the same to allow comparison between the previous surveys and 2006, we based the decisions to modify some questions on the results of the previous analyses and changes in focused subject matter areas. Institutional Review Board (IRB) approval was received from the University of Maryland School of Medicine IRB and from the DHMH IRB. The MCS 2006 questionnaire is included at the end of this report.

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<sup>1</sup> Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System, User Guide, Version 3.0. Atlanta, GA; 2005. Available at <http://www.cdc.gov/brfss/pdf/userguide.pdf>. Last accessed July 12, 2007.

## Data Collection

As in 2002 and 2004, REDA International, Inc., a survey and research firm located in Wheaton, Maryland, conducted the MCS 2006 using CATI technology. To reach a final disposition for each telephone number, 15 calling attempts were made on various days of the week and at different times of the day. If someone answered the telephone, the number was confirmed to be a residential phone number. (Cell phones and non-residential numbers were excluded.) If REDA determined that there was at least one person age 40 years or older living in the household, he or she was invited to participate in the survey. If two or more age-eligible persons lived there, one was randomly selected to be interviewed. An anonymous questionnaire was administered, lasting an average of 20 minutes. Interviewers asked questions about demographics, cancer screening behaviors, health risk factors, and access to health care.

Sixty-one thousand two hundred seventy-three (61,273) telephone numbers were screened or called. Of these, 8.5% (5,187 phone numbers) resulted in completed interviews; 29.6% were non-working numbers; 13.6% were phone numbers of a business or institution; and 4.3% were a dedicated fax/modem. Approximately 0.4% of the numbers were ineligible due to a language barrier, other than Spanish. The remaining phone numbers (43.6%) were ineligible for a variety of reasons. The Council of American Survey Research Organizations (CASRO) response rate, defined as Completed Interviews/(Known Eligible + Presumed Eligible), was 39.7%. The completion rate, defined as Completed Interviews/Known Eligible, was 75.1%.

## Data Analysis

A final weight was assigned to each respondent, according to the BRFSS weighting protocol.<sup>2</sup> Respondents who refused to report race (n=38) were omitted from the analysis, since race (in addition to age and gender) was required for weighting, resulting in a final analytic sample of 5,149 persons. For 40 respondents who did not report their age, we imputed an age based on the mean age of other respondents in the same geographic stratum who had the same race and gender. Pre-stratification weighting was based on the sampling probability by geographic region (urban vs. rural), residential telephone sampling among the two density strata of phone numbers ('listed one-plus' and 'not listed one-plus'), the number of adults age 40 years and older in the respondent's household, and the inverse of the number of residential telephone numbers in each household. Post-stratification weighting was calculated as the number of adults age 40 years and older in an age-race-gender category in the population of the urban or rural region divided by the sum of the pre-stratification weights for the respondents in that same age-race-gender category. Respondents were asked to list their race as one of the following: White; Black or African American; Asian; Native Hawaiian or Other Pacific Islander; American Indian or Alaska Native; or Other. Because of small numbers of respondents in some race groups, people who reported their race as something different from White or Black or African American were grouped together as people of Other Races. The age strata consisted of 5-year age groups (e.g., 40-44, 45-49, etc.) ranging from 40 through 69 years of age. Those aged 70 years and older were combined into one age stratum because of small sample size in the older age-race-gender strata. A final weight was calculated based on the pre- and post-stratification weights. We did not age adjust the data to the 2000 United States standard population.

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<sup>2</sup> Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System. Technical Information and Data. BRFSS Weighting Formula. Atlanta, GA. Available at [http://www.cdc.gov/brfss/technical\\_infodata/weighting.htm](http://www.cdc.gov/brfss/technical_infodata/weighting.htm). Last accessed July 12, 2007.

For all demographic variables except income, there was a small number of responses of “don’t know/not sure” and “refused”; these responses were set to “missing” and do not contribute to the tabulated frequencies. An exception is for reported annual household income, where the categories of “don’t know/not sure” and “refused” are included in the tabulations. For purposes of the tabular analyses, groupings were made for the following categorical variables. Marital status was grouped into four categories: married or the partner of an unmarried couple; divorced or separated; widowed; and never married. Education levels were combined into five categories: less than high school; high school graduate or General Equivalency Diploma (GED); some college (1-3 years); college graduate; and advanced degree. Employment was grouped into four categories: employed for wages; self-employed; retired; and “other” employment status. (Persons unemployed for either less than or greater than one year, homemakers, students, and those unable to work were all combined in the “other” category.) Reported annual household income categories were grouped into five categories: <\$25,000; \$25,000-<\$35,000; \$35,000-<\$50,000; \$50,000-<\$75,000; and \$75,000 or greater. Results in the tables are based on the number of respondents that answered a question.

Respondents were asked whether they had ever received various tests for cancer screening. The results in this report are based on responses that the test was performed, whether or not it was specifically done for cancer screening. For instance, an asymptomatic woman can have a mammogram for screening, or a symptomatic woman can have a diagnostic mammogram because she feels a lump in her breast. In both cases, the answer to the question “have you ever had a mammogram?” is “yes” and both answers would be reported in the same manner. The time period since the last screening episode was asked for each screening test so we could determine whether respondents were up-to-date with screening recommendations. If the respondent did not report the length of time since the last screening or refused to answer, that respondent was considered to be NOT up-to-date with screening.

“Current smokers” were defined as those who smoked at least 100 cigarettes or more in their entire life and, at the time of the survey, smoked every day or some days. “Former smokers” were those who smoked at least 100 cigarettes in their life but were not smoking cigarettes at the time of the survey. “Non-smokers” were those who smoked less than 100 cigarettes in their life or who had never smoked. Alcohol consumption was categorized according to use in the last 30 days: no alcohol use (in the last 30 days); low-risk drinking; and high-risk drinking. Binge drinking is defined as five or more drinks on the same occasion at least one day in the past 30 days.<sup>3</sup> For women, low-risk drinking was defined as having no more than seven drinks a week and not engaging in binge drinking. Low-risk drinking for men was defined as having no more than 14 drinks a week and not engaging in binge drinking. High-risk drinking was defined as engaging in binge drinking or consuming more than 14 drinks a week for men and more than seven drinks a week for women. Daily fruit and vegetable intake was calculated by summing the responses from questions about daily or weekly consumption of fruits, fruit juice, leafy salad greens, and vegetables.

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<sup>3</sup> U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. Vol.II. Substance Abuse. Washington, DC: U.S. Government Printing Office, November 2000. Available at <http://www.healthypeople.gov/document/HTML/Volume2/26Substance.htm>. Last accessed July 12, 2007.

The following table describes the specific segment of the sample for which questions on the different survey topics were analyzed.

| <b>Survey topic/question</b>                          | <b>Men</b> | <b>Women</b>                                   | <b>Age category</b>                                                                                                                                        |
|-------------------------------------------------------|------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Oral cancer screening                                 | ✓          | ✓                                              | 40 years and older                                                                                                                                         |
| Breast cancer screening                               |            | ✓                                              | 40 years and older                                                                                                                                         |
| Cervical cancer screening                             |            | ✓ (only women who did not have a hysterectomy) | 40 years and older                                                                                                                                         |
| Colorectal cancer (CRC) screening                     | ✓          | ✓                                              | 50 years and older                                                                                                                                         |
| Knowledge of CRC screening                            | ✓          | ✓                                              | 40 years and older                                                                                                                                         |
| Prostate cancer screening (PSA, DRE)                  | ✓          |                                                | <ul style="list-style-type: none"> <li>• Black or African American men, age 45 years and older</li> <li>• All other men, age 50 years and older</li> </ul> |
| Discussed prostate screening with health professional | ✓          |                                                | 40 years and older                                                                                                                                         |

Statistical analyses (population-based numbers and percentages) were performed with weighted data using SAS Version 9.1. Unless otherwise stated, results in the tables of the report have the following values: “N” is the number of people in the sample who responded to a survey question; “n” represents the number of persons in the survey answering “yes” to that question or the number of people who had that characteristic; the “wt %” (weighted percent) is the percent of the Maryland population based on the weighted sample who answered “yes” to the question or had that characteristic; and the “95% CI” is the 95% confidence interval around the weighted percent. All percentages are based on the number of respondents answering the question, and exclude missing, “don’t know/not sure,” and “refused” answers (except for income and time since last screening episode, as previously described). No results are suppressed in this report because of the small number of respondents in some sub-groups. Prevalence estimates derived from samples with less than 50 observations are included in the tables, but may be unreliable due to small numbers. Caution should be exercised when making comparisons based on a small number of respondents.

In the tables, the heading “Stat Sig” stands for statistical significance. Statistical significance for a selected characteristic is explained by the symbol appearing in the “Stat Sig” column opposite the specific survey question. The symbol “\*\*” in this column shows that there is a statistically significant difference with a p-value  $\leq 0.05$  for the selected characteristic. The symbol “\*” indicates a marginally significant difference with a p-value  $>0.05$  and  $\leq 0.1$ . The symbol “^” shows that the differences were not statistically significant (i.e., p-value  $> 0.1$ ). When reviewing the tables, it is important to remember that, while a difference may be

“statistically significant,” the clinical or practical importance of the difference may not be significant.

Throughout the report, comparisons are made between MCS results and national targets established in Healthy People 2010 and to other national estimates or baselines (e.g., the National Health Interview Survey or the Behavioral Risk Factor Surveillance System survey). Comparisons to HP 2010 have been revised, where necessary, to reflect changes found in the HP 2010 mid-course review (December 2006).<sup>4</sup> HP 2010 targets for smoking, alcohol consumption, and physical activity are intended for the adult population age 18 years and older, and fruit and vegetable consumption targets are based on persons age 2 years and older. These HP 2010 targets are included in this report as a basis for general comparison with the MCS results, which reflect Maryland adults age 40 years and older.

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<sup>4</sup> U.S. Department of Health and Human Services. Healthy People 2010 Midcourse Review. Washington, DC; 2006. Available at <http://www.healthypeople.gov/data/midcourse/default.htm#pubs>. Last accessed July 12, 2007.

### Chapter 3. The Survey Sample

A total of 5,187 people were interviewed for the survey. The entire records for 38 people who refused to give their race were omitted from the dataset for analysis, leaving 5,149 respondents in the analytic dataset. We weighted the sample to match the Maryland population by age, race, gender, and area of residence (urban vs. rural). Table 3-1 shows the sample and weighted percentages for the respondents in the MCS 2006 by area of residence; 59.6% of the survey respondents lived in urban areas of Maryland and 40.4% lived in rural areas. Urban respondents were weighted to 78.3% of the Maryland population and rural respondents were weighted to 21.7%.

Table 3-1. Sample percentage and weighted percentage of the urban and rural strata for the Maryland Cancer Survey, 2006.

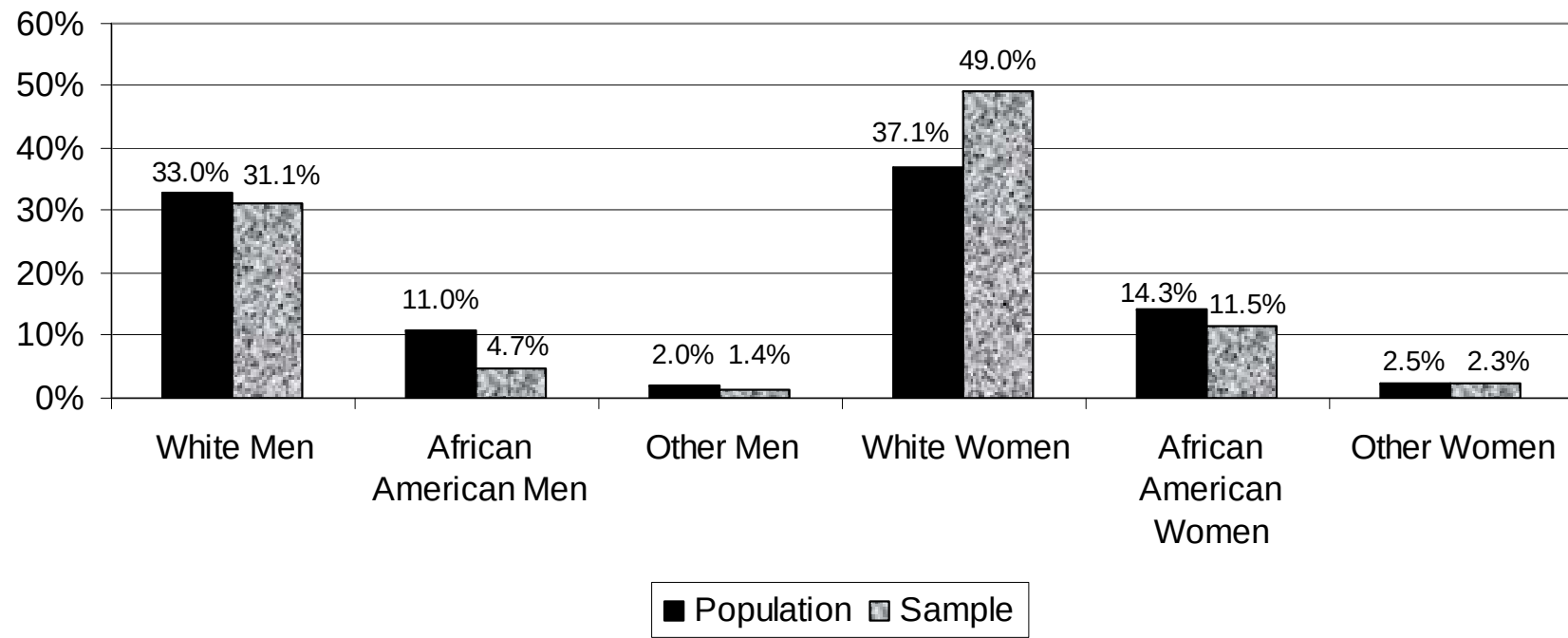
|              | Sample N | Sample % | Weighted % |
|--------------|----------|----------|------------|
| <b>Total</b> | 5,149    | 100.0%   | 100.0%     |
| <b>Urban</b> | 3,071    | 59.6%    | 78.3%      |
| <b>Rural</b> | 2,078    | 40.4%    | 21.7%      |

Table 3-2 shows the demographics of the sample, and the demographics after being weighted to the Maryland population. Whites comprised 80.1% of the sample, Blacks or African Americans made up 16.2%, Asians comprised 1.4%, Native Hawaiians or Other Pacific Islanders made up 0.2%, American Indians or Alaska Natives made up 0.7%, and other responses comprised 1.5% of the sample. (The term “African American” is used in the report to represent people who called their race African American or Black. In the analysis, “Other” race refers to people who called their race something different from White or African American, and includes Asian, Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native, and any other responses to the race question.) Whites were weighted to 70.2% of the population, African Americans were weighted to 25.3%, and people of other races were weighted to 4.7% of the population. Women made up 62.8% of the sample, and are weighted to 53.9%, the percent of women in the Maryland population.

Charts 3-1 and 3-2 compare the race/gender groups and the age of the survey respondents to the Maryland population, which equals their final weighted percents. White women made up 49.0% of the sample, whereas they account for 37.1% of the Maryland population (Chart 3-1). African American men made up 4.7% of the sample and are weighted to match 11.0% of the population. People age 65 years and older made up 32.9% of the sample, and are weighted to 25.1% of the population (Chart 3-2).

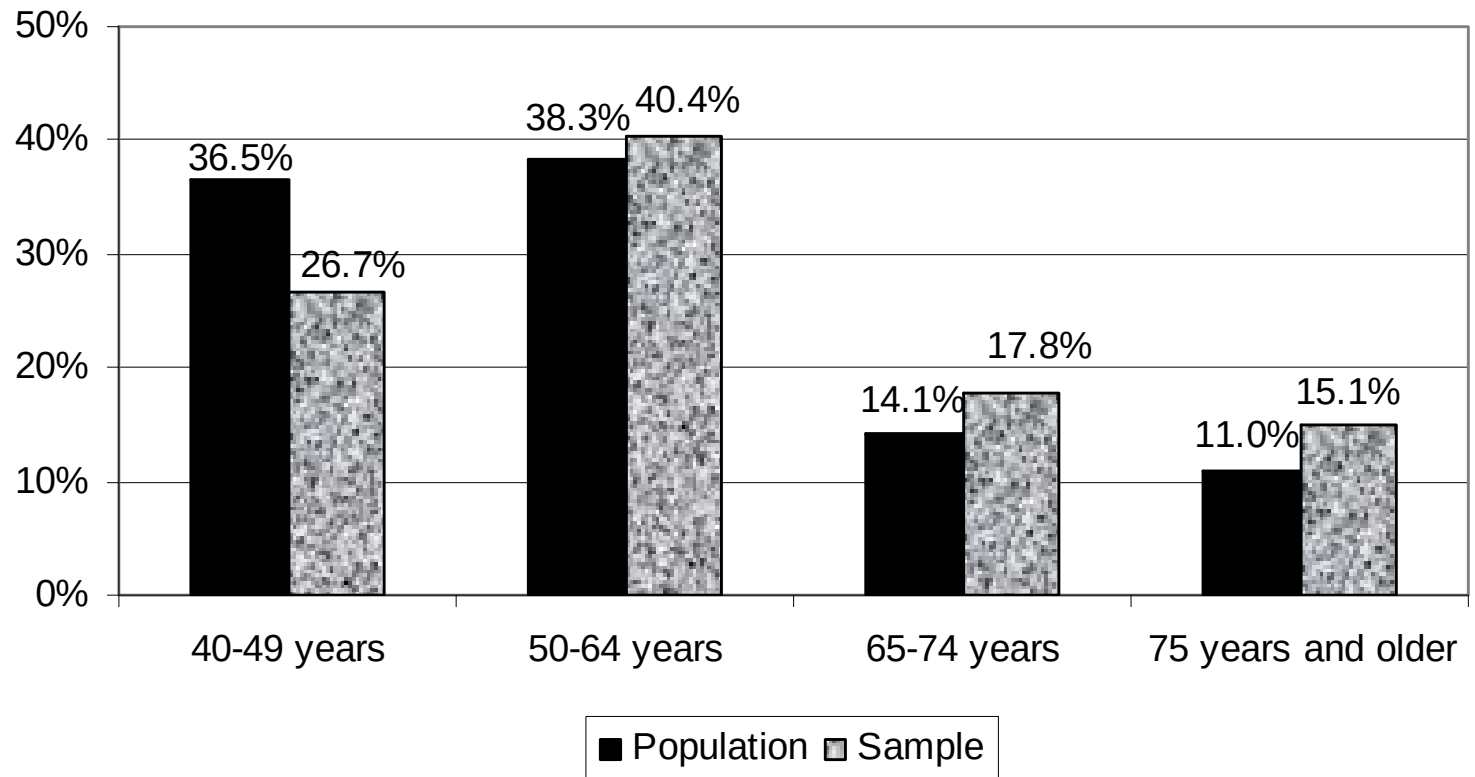
The number of people who were surveyed in each jurisdiction, by gender and race, based on self-report of their jurisdiction of residence, is shown in Table 3-3.

**Chart 3-1. Comparison of the 2006 survey sample to Maryland's population by race and gender**





**Chart 3-2. Comparison of the 2006 survey sample to Maryland's population by age**



**TABLE 3-2. DEMOGRAPHICS OF THE SURVEY SAMPLE, AGE 40 YEARS AND OLDER, WEIGHTED TO THE MARYLAND POPULATION,  
AGE 40 YEARS AND OLDER**

| Selected Characteristic                | TOTAL    |          |       |            | URBAN    |          |       |            | RURAL    |          |       |            |
|----------------------------------------|----------|----------|-------|------------|----------|----------|-------|------------|----------|----------|-------|------------|
|                                        | Sample N | Sample % | wt %  | 95% CI     | Sample N | Sample % | wt %  | 95% CI     | Sample N | Sample % | wt %  | 95% CI     |
| <b>Gender</b>                          |          |          |       |            |          |          |       |            |          |          |       |            |
| Male                                   | 1914     | 37.2%    | 46.1% |            | 1108     | 36.1%    | 45.7% |            | 806      | 38.8%    | 47.5% |            |
| Female                                 | 3235     | 62.8%    | 53.9% |            | 1963     | 63.9%    | 54.3% |            | 1272     | 61.2%    | 52.5% |            |
| <b>Age</b>                             |          |          |       |            |          |          |       |            |          |          |       |            |
| 40-49 years                            | 1373     | 26.7%    | 36.5% |            | 840      | 27.4%    | 36.7% |            | 533      | 25.6%    | 35.8% |            |
| 50-64 years                            | 2078     | 40.4%    | 38.3% |            | 1253     | 40.8%    | 38.6% |            | 825      | 39.7%    | 37.3% |            |
| 65 -74 years                           | 918      | 17.8%    | 14.1% |            | 526      | 17.1%    | 13.9% |            | 392      | 18.9%    | 15.0% |            |
| 75 years and older                     | 780      | 15.1%    | 11.0% |            | 452      | 14.7%    | 10.8% |            | 328      | 15.8%    | 11.9% |            |
| <b>Race</b>                            |          |          |       |            |          |          |       |            |          |          |       |            |
| White                                  | 4125     | 80.1%    | 70.2% |            | 2254     | 73.4%    | 65.4% |            | 1871     | 90.0%    | 87.1% |            |
| African American or Black              | 834      | 16.2%    | 25.3% |            | 677      | 22.0%    | 29.2% |            | 157      | 7.5%     | 11.3% |            |
| Asian                                  | 70       | 1.4%     | 1.8%  |            | 56       | 1.8%     | 2.2%  |            | 14       | 0.7%     | 0.4%  |            |
| Native Hawaiian/Other Pacific Islander | 8        | 0.2%     | 0.3%  |            | 8        | 0.3%     | 0.3%  |            | 0        | 0.0%     | 0.0%  |            |
| American Indian/Alaska Native          | 36       | 0.7%     | 0.8%  |            | 19       | 0.6%     | 0.8%  |            | 17       | 0.8%     | 0.5%  |            |
| Other                                  | 76       | 1.5%     | 1.8%  |            | 57       | 1.9%     | 2.1%  |            | 19       | 0.9%     | 0.7%  |            |
| <b>Gender and Race</b>                 |          |          |       |            |          |          |       |            |          |          |       |            |
| White male                             | 1601     | 31.1%    | 33.1% |            | 861      | 28.0%    | 30.7% |            | 740      | 35.6%    | 41.6% |            |
| African American male                  | 241      | 4.7%     | 11.0% |            | 198      | 6.4%     | 12.6% |            | 43       | 2.1%     | 5.2%  |            |
| Other male                             | 72       | 1.4%     | 2.0%  |            | 49       | 1.6%     | 2.4%  |            | 23       | 1.1%     | 0.7%  |            |
| White female                           | 2524     | 49.0%    | 37.1% |            | 1393     | 45.4%    | 34.7% |            | 1131     | 54.4%    | 45.5% |            |
| African American female                | 593      | 11.5%    | 14.3% |            | 479      | 15.6%    | 16.6% |            | 114      | 5.5%     | 6.1%  |            |
| Other female                           | 118      | 2.3%     | 2.5%  |            | 91       | 3.0%     | 3.0%  |            | 27       | 1.3%     | 0.9%  |            |
| <b>Hispanic Ethnicity</b>              |          |          |       |            |          |          |       |            |          |          |       |            |
| Yes                                    | 117      | 2.3%     | 2.5%  | 1.9-3.0%   | 77       | 2.5%     | 2.6%  | 2.0-3.3%   | 40       | 1.9%     | 1.9%  | 1.2-2.6%   |
| No                                     | 5021     | 97.7%    | 97.5% | 97.0-98.1% | 2988     | 97.5%    | 97.4% | 96.7-98.0% | 2033     | 98.1%    | 98.1% | 97.4-98.8% |
| <b>Marital Status</b>                  |          |          |       |            |          |          |       |            |          |          |       |            |
| Married                                | 3011     | 58.7%    | 67.3% | 65.7-68.8% | 1733     | 56.7%    | 66.1% | 64.2-68.0% | 1278     | 61.5%    | 71.6% | 69.5-73.7% |
| Divorced                               | 738      | 14.4%    | 11.2% | 10.3-12.2% | 457      | 14.9%    | 11.5% | 10.3-12.7% | 281      | 13.5%    | 10.2% | 8.8-11.6%  |
| Widowed                                | 770      | 15.0%    | 8.9%  | 8.1-9.6%   | 438      | 14.3%    | 8.7%  | 7.8-9.6%   | 332      | 15.9%    | 9.5%  | 8.4-10.6%  |
| Separated                              | 148      | 2.9%     | 2.7%  | 2.2-3.3%   | 93       | 3.0%     | 2.8%  | 2.1-3.5%   | 55       | 2.6%     | 2.4%  | 1.6-3.2%   |
| Never married                          | 404      | 7.9%     | 8.4%  | 7.4-9.4%   | 295      | 9.7%     | 9.3%  | 8.1-10.5%  | 109      | 5.2%     | 5.3%  | 4.0-6.5%   |
| Partner of unmarried couple            | 61       | 1.2%     | 1.5%  | 1.0-1.9%   | 39       | 1.3%     | 1.6%  | 1.0-2.2%   | 22       | 1.1%     | 1.1%  | 0.6-1.5%   |

Sample N -respondents in the sample with that characteristic  
Sample % -percent in the sample with that characteristic

**TABLE 3-2. DEMOGRAPHICS OF THE SURVEY SAMPLE, AGE 40 YEARS AND OLDER, WEIGHTED TO THE MARYLAND POPULATION, AGE 40 YEARS AND OLDER**

| Selected Characteristic                  | TOTAL    |          |       |            | URBAN    |          |       |            | RURAL    |          |       |            |
|------------------------------------------|----------|----------|-------|------------|----------|----------|-------|------------|----------|----------|-------|------------|
|                                          | Sample N | Sample % | wt %  | 95% CI     | Sample N | Sample % | wt %  | 95% CI     | Sample N | Sample % | wt %  | 95% CI     |
| <b>Education</b>                         |          |          |       |            |          |          |       |            |          |          |       |            |
| Kindergarten or less                     | 4        | 0.08%    | 0.08% | 0.0-0.2%   | 3        | 0.1%     | 0.1%  | 0.0-0.2%   | 1        | 0.05%    | 0.03% | 0-0.1%     |
| Grades 1-8                               | 106      | 2.1%     | 1.9%  | 1.4-2.3%   | 64       | 2.1%     | 1.9%  | 1.3-2.4%   | 42       | 2.0%     | 1.9%  | 1.3-2.5%   |
| Grades 9-11                              | 302      | 5.9%     | 5.8%  | 5.0-6.7%   | 142      | 4.6%     | 5.3%  | 4.2-6.3%   | 160      | 7.7%     | 7.6%  | 6.2-9.0%   |
| High school grad or GED                  | 1421     | 27.7%    | 26.0% | 24.5-27.4% | 687      | 22.4%    | 23.1% | 21.4-24.9% | 734      | 35.4%    | 36.1% | 33.6-38.5% |
| College 1-3 years                        | 1240     | 24.1%    | 23.6% | 22.1-25.1% | 712      | 23.2%    | 23.1% | 21.3-24.9% | 528      | 25.5%    | 25.4% | 23.2-27.6% |
| College grad                             | 1109     | 21.6%    | 22.8% | 21.4-24.3% | 753      | 24.6%    | 24.5% | 22.7-26.3% | 356      | 17.2%    | 16.9% | 15.1-18.7% |
| Master's degree                          | 649      | 12.6%    | 13.3% | 12.1-14.4% | 458      | 14.9%    | 14.5% | 13.1-15.9% | 191      | 9.2%     | 8.9%  | 7.6-10.3%  |
| Doctoral or advanced professional degree | 306      | 6.0%     | 6.6%  | 5.7-7.4%   | 244      | 8.0%     | 7.5%  | 6.5-8.6%   | 62       | 3.0%     | 3.1%  | 2.2-4.0%   |
| <b>Employment Status</b>                 |          |          |       |            |          |          |       |            |          |          |       |            |
| Employed for Wages                       | 2295     | 44.7%    | 50.0% | 48.3-51.8% | 1417     | 46.3%    | 50.5% | 48.5-52.6% | 878      | 42.3%    | 48.2% | 45.7-50.8% |
| Self Employed                            | 438      | 8.5%     | 9.1%  | 8.2-10.1%  | 272      | 8.9%     | 9.3%  | 8.1-10.5%  | 166      | 8.0%     | 8.6%  | 7.2-10.0%  |
| Unemployed > 1 year                      | 91       | 1.8%     | 2.6%  | 1.8-3.4%   | 61       | 2.0%     | 2.8%  | 1.8-3.8%   | 30       | 1.4%     | 1.9%  | 1.1-2.8%   |
| Unemployed < 1 year                      | 62       | 1.2%     | 1.6%  | 1.1-2.1%   | 39       | 1.3%     | 1.7%  | 1.1-2.3%   | 23       | 1.1%     | 1.4%  | 0.7-2.0%   |
| Homemaker                                | 280      | 5.5%     | 5.2%  | 4.5-5.9%   | 162      | 5.3%     | 5.1%  | 4.3-6.0%   | 118      | 5.7%     | 5.5%  | 4.4-6.6%   |
| Student                                  | 17       | 0.3%     | 0.4%  | 0.2-0.6%   | 13       | 0.4%     | 0.5%  | 0.2-0.8%   | 4        | 0.2%     | 0.2%  | 0-0.4%     |
| Retired                                  | 1730     | 33.7%    | 26.8% | 25.4-28.2% | 978      | 32.0%    | 26.1% | 24.4-27.8% | 752      | 36.2%    | 29.2% | 27.1-31.3% |
| Unable to work                           | 221      | 4.3%     | 4.2%  | 3.5-4.9%   | 117      | 3.8%     | 4.0%  | 3.2-4.8%   | 104      | 5.0%     | 5.0%  | 3.9-6.1%   |
| <b>Household Income</b>                  |          |          |       |            |          |          |       |            |          |          |       |            |
| Less than \$10,000                       | 150      | 2.9%     | 2.4%  | 1.9-2.9%   | 80       | 2.6%     | 2.3%  | 1.7-2.9%   | 70       | 3.4%     | 2.7%  | 1.9-3.4%   |
| \$10,000-<\$15,000                       | 179      | 3.5%     | 2.7%  | 2.2-3.3%   | 82       | 2.7%     | 2.4%  | 1.8-3.1%   | 97       | 4.7%     | 3.7%  | 2.9-4.6%   |
| \$15,000-<\$20,000                       | 234      | 4.5%     | 3.9%  | 3.3-4.6%   | 127      | 4.1%     | 3.8%  | 3.0-4.6%   | 107      | 5.1%     | 4.2%  | 3.3-5.1%   |
| \$20,000-<\$25,000                       | 306      | 5.9%     | 5.4%  | 4.6-6.1%   | 173      | 5.6%     | 5.3%  | 4.4-6.2%   | 133      | 6.4%     | 5.6%  | 4.5-6.7%   |
| \$25,000-<\$35,000                       | 453      | 8.8%     | 8.0%  | 7.1-9.0%   | 251      | 8.2%     | 7.8%  | 6.7-8.9%   | 202      | 9.7%     | 8.8%  | 7.4-10.2%  |
| \$35,000-<\$50,000                       | 621      | 12.1%    | 11.3% | 10.2-12.3% | 355      | 11.6%    | 10.9% | 9.7-12.1%  | 266      | 12.8%    | 12.7% | 11.0-14.3% |
| \$50,000-<\$75,000                       | 748      | 14.5%    | 14.7% | 13.5-15.9% | 423      | 13.8%    | 14.0% | 12.6-15.4% | 325      | 15.6%    | 17.0% | 15.0-19.0% |
| \$75,000 or greater                      | 1682     | 32.7%    | 37.8% | 36.1-39.5% | 1119     | 36.4%    | 39.7% | 37.7-41.8% | 563      | 27.1%    | 31.0% | 28.6-33.3% |
| Don't know/not sure                      | 320      | 6.2%     | 5.3%  | 4.6-6.0%   | 175      | 5.7%     | 5.0%  | 4.2-5.8%   | 145      | 7.0%     | 6.5%  | 5.2-7.7%   |
| Refused                                  | 456      | 8.9%     | 8.5%  | 7.5-9.5%   | 286      | 9.3%     | 8.6%  | 7.4-9.9%   | 170      | 8.2%     | 7.9%  | 6.5-9.4%   |

The "wt %" for gender, age, race, and gender/race is equal to the actual population percent because the sample was weighted to match the Maryland population by these characteristics

Sample N -respondents in the sample with that characteristic  
Sample % -percent in the sample with that characteristic

**TABLE 3-3. TOTAL NUMBER AND PERCENT OF PEOPLE INTERVIEWED IN EACH JURISDICTION, BY GENDER AND RACE**

|                        | Males |       | Females |       | Whites |       | African Americans/<br>Blacks |       | Other Race |      | Total |                |
|------------------------|-------|-------|---------|-------|--------|-------|------------------------------|-------|------------|------|-------|----------------|
| Jurisdiction           | n     | %     | n       | %     | n      | %     | n                            | %     | n          | %    | n     | % of<br>sample |
| <b>Allegany</b>        | 56    | 40.0% | 84      | 60.0% | 137    | 97.9% | 2                            | 1.4%  | 1          | 0.7% | 140   | 2.7%           |
| <b>Anne Arundel</b>    | 158   | 37.5% | 263     | 62.5% | 371    | 88.1% | 34                           | 8.1%  | 16         | 3.8% | 421   | 8.2%           |
| <b>Baltimore City</b>  | 113   | 33.3% | 226     | 66.7% | 151    | 44.5% | 174                          | 51.3% | 14         | 4.1% | 339   | 6.6%           |
| <b>Baltimore</b>       | 211   | 33.8% | 413     | 66.2% | 505    | 80.9% | 100                          | 16.0% | 19         | 3.0% | 624   | 12.2%          |
| <b>Calvert</b>         | 67    | 43.2% | 88      | 56.8% | 130    | 83.9% | 19                           | 12.3% | 6          | 3.9% | 155   | 3.0%           |
| <b>Caroline</b>        | 17    | 33.3% | 34      | 66.7% | 44     | 86.3% | 6                            | 11.8% | 1          | 2.0% | 51    | 1.0%           |
| <b>Carroll</b>         | 57    | 39.3% | 88      | 60.7% | 139    | 95.9% | 2                            | 1.4%  | 4          | 2.8% | 145   | 2.8%           |
| <b>Cecil</b>           | 59    | 39.1% | 92      | 60.9% | 143    | 94.7% | 4                            | 2.6%  | 4          | 2.6% | 151   | 2.9%           |
| <b>Charles</b>         | 67    | 37.6% | 111     | 62.4% | 132    | 74.2% | 37                           | 20.8% | 9          | 5.1% | 178   | 3.5%           |
| <b>Dorchester</b>      | 15    | 27.8% | 39      | 72.2% | 49     | 90.7% | 3                            | 5.6%  | 2          | 3.7% | 54    | 1.1%           |
| <b>Frederick</b>       | 126   | 38.1% | 205     | 61.9% | 315    | 95.2% | 13                           | 3.9%  | 3          | 0.9% | 331   | 6.5%           |
| <b>Garrett</b>         | 32    | 39.5% | 49      | 60.5% | 79     | 97.5% | 0                            | 0.0%  | 2          | 2.5% | 81    | 1.6%           |
| <b>Harford</b>         | 68    | 40.2% | 101     | 59.8% | 150    | 88.8% | 17                           | 10.1% | 2          | 1.2% | 169   | 3.3%           |
| <b>Howard</b>          | 85    | 39.9% | 128     | 60.1% | 174    | 81.7% | 26                           | 12.2% | 13         | 6.1% | 213   | 4.2%           |
| <b>Kent</b>            | 19    | 32.2% | 40      | 67.8% | 50     | 84.7% | 8                            | 13.6% | 1          | 1.7% | 59    | 1.2%           |
| <b>Montgomery</b>      | 273   | 38.5% | 437     | 61.5% | 594    | 83.7% | 74                           | 10.4% | 42         | 5.9% | 710   | 13.9%          |
| <b>Prince George's</b> | 148   | 33.6% | 293     | 66.4% | 166    | 37.6% | 246                          | 55.8% | 29         | 6.6% | 441   | 8.6%           |
| <b>Queen Anne's</b>    | 34    | 45.3% | 41      | 54.7% | 67     | 89.3% | 8                            | 10.7% | 0          | 0.0% | 75    | 1.5%           |
| <b>St. Mary's</b>      | 59    | 39.6% | 90      | 60.4% | 134    | 89.9% | 10                           | 6.7%  | 5          | 3.4% | 149   | 2.9%           |
| <b>Somerset</b>        | 12    | 34.3% | 23      | 65.7% | 28     | 80.0% | 7                            | 20.0% | 0          | 0.0% | 35    | 0.7%           |
| <b>Talbot</b>          | 28    | 38.4% | 45      | 61.6% | 68     | 93.2% | 4                            | 5.5%  | 1          | 1.4% | 73    | 1.4%           |
| <b>Washington</b>      | 108   | 38.6% | 172     | 61.4% | 266    | 95.0% | 9                            | 3.2%  | 5          | 1.8% | 280   | 5.5%           |
| <b>Wicomico</b>        | 51    | 37.5% | 85      | 62.5% | 115    | 84.6% | 15                           | 11.0% | 6          | 4.4% | 136   | 2.7%           |
| <b>Worcester</b>       | 43    | 39.4% | 66      | 60.6% | 95     | 87.2% | 12                           | 11.0% | 2          | 1.8% | 109   | 2.1%           |

Jurisdiction was not specified by 30 respondents.

Maryland Cancer Survey, 2006

## Chapter 4. Colorectal Cancer Screening

Cancer of the colon and rectum (referred to as colorectal cancer or CRC) was chosen as one of the seven cancers targeted for intervention by the Cigarette Restitution Fund Program, because of its incidence in Maryland and because CRC is amenable to prevention through screening and early detection. CRC is the fourth most common cancer (excluding non-melanoma skin cancer) in Maryland, behind prostate, female breast, and lung cancer. In 2002, it was the second leading cause of cancer deaths in Maryland.<sup>1</sup> For the period 2000 – 2004, Maryland had the 12<sup>th</sup> highest mortality rate for CRC among the 50 states and the District of Columbia.<sup>2</sup> This represents a considerable change in ranking since the period 1997 – 2001, when Maryland had the 5<sup>th</sup> highest CRC mortality rate in the nation.

The most commonly used tests for detecting pre-malignant lesions (i.e., benign adenomas) and invasive CRC are the fecal occult blood test (FOBT), the fecal immunochemical test (FIT), sigmoidoscopy, and colonoscopy (sigmoidoscopy and colonoscopy are both “lower gastrointestinal (GI) endoscopies”). For people at average risk for developing CRC, the American Cancer Society (ACS) recommends one of the following screening modalities:

- Annual FOBT or FIT;
- Sigmoidoscopy every 5 years;
- Sigmoidoscopy every 5 years with annual FOBT or FIT; or
- Colonoscopy every 10 years or double contrast barium enema (DCBE) every 5 years.<sup>3</sup>

(Although the ACS recommendations include DCBE as a screening option for CRC, this method was not included in the MCS questionnaire or analysis.)

Public health programs were implemented during fiscal year (FY) 2001 for education about and screening for CRC by all local health departments in Maryland, except Baltimore City. In FY 2004, Anne Arundel County stopped CRC screening but continued to educate its population. In summer 2006, Baltimore City began CRC screening for a limited number of residents under a demonstration project funded by the Centers for Disease Control and Prevention (CDC).

### Familiarity with CRC Screening Tests

Before being given any information about CRC screening tests, respondents were asked about their familiarity with screening tests for CRC.

- Ninety-four percent (94%) of all respondents age 40 years and older reported knowing there are screening tests for CRC (Table 4-1).

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<sup>1</sup> Maryland Department of Health and Mental Hygiene. Cancer Report 2006. Baltimore, MD; 2006. Available at [http://www.fha.state.md.us/cancer/surveillance/pdf/CRF\\_Can\\_Rpt\\_2006\\_Final\\_PNO\\_v9u.pdf](http://www.fha.state.md.us/cancer/surveillance/pdf/CRF_Can_Rpt_2006_Final_PNO_v9u.pdf). Last accessed July 11, 2007.

<sup>2</sup> Ries LAG et al. (eds). *SEER Cancer Statistics Review, 1975-2003*, National Cancer Institute. Bethesda, MD; Available at [http://seer.cancer.gov/csr/1975\\_2003](http://seer.cancer.gov/csr/1975_2003) (based on November 2005 SEER data submission). Last accessed July 13, 2006..

<sup>3</sup> American Cancer Society, Cancer Detection Guidelines. Available at [http://www.cancer.org/docroot/PED/content/PED\\_2\\_3X\\_ACS\\_Cancer\\_Detection\\_Guidelines\\_36.asp?sitearea=PED](http://www.cancer.org/docroot/PED/content/PED_2_3X_ACS_Cancer_Detection_Guidelines_36.asp?sitearea=PED) Last accessed July 11, 2007.

- Without any prompting by the interviewer, 61% of respondents were able to name colonoscopy, 16% named FOBT, and 9% identified sigmoidoscopy as CRC screening tests. Far fewer respondents (less than 4%) named barium enema, digital rectal exam, proctoscopy, or radiologic scans as screening tests for CRC. One in four respondents (26%) could not name any tests for CRC detection. (Respondents could give more than one answer; Table 4-2.)

After hearing a description of the fecal occult blood test (FOBT), sigmoidoscopy, and colonoscopy, participants were asked whether they had heard of these specific tests (Table 4-3):

- Seventy-seven percent (77%) of all respondents age 40 years and older had heard of the home kit for the FOBT.
- Ninety-two percent (92%) of respondents had heard of lower GI endoscopy as a means of examining the colon.
- Familiarity with CRC screening tests was statistically significantly lower among males, younger respondents (under age 50 years), and non-White respondents.
- Eighty-six percent (86%) of all respondents have seen or heard CRC screening promoted (e.g., in the media, at a health care facility, or some other place). Only 25% reported having heard that the local health departments had no-cost screening for low-income individuals (Table 4-4).

#### Prevalence of CRC Screening with FOBT

Hidden blood in the stool is often an early warning sign of colorectal disease, including CRC. There are two types of home kits used to detect small amounts of blood in the stool. The older Fecal Occult Blood Test (FOBT) is a guaiac-based test that detects peroxidase activity found in hemoglobin. However, in addition to detecting human hemoglobin, the FOBT test can also detect animal hemoglobin in the stool (from consumption of red meat), which can potentially lead to false-positive results. A newer, more sensitive test for detecting blood in the stool is the fecal immunochemical test (FIT), which is specific for human hemoglobin. Health care providers (HCPs) often recommend either of these home tests to their patients as an initial CRC screening measure. In the home test, a person smears a small amount of stool on a card for 2 or 3 successive days, and mails the card to a laboratory for analysis.

Among Maryland Cancer Survey (MCS) respondents age 50 years and older,

- Fifty-seven percent (57%) have ever performed a home FOBT (Table 4-5 and Chart 4-1).
  - Screening prevalence was significantly higher among persons age 65 years and older (66%), compared to those age 50-64 years (51%).
  - Whites (58%) and African-Americans (57%) were more likely to have ever had an FOBT than persons of other races (35%).
  - The proportion of people that have ever had an FOBT generally increased as level of education increased.
  - Respondents in the lowest income group had a significantly lower prevalence of ever having an FOBT, compared with respondents in higher income groups.

According to the American Cancer Society (ACS), if the home FOBT is the primary test being used for CRC screening, the test should be performed each year.

- Twenty-one percent (21%) of survey respondents age 50 years and older said they have performed a home FOBT in the last year. (Data not shown in tables.)

Among those age 50 and older who have never done a home FOBT or had not done a home FOBT in the past year, the most frequently cited reasons were (Table 4-6; more than one response could be given per respondent):

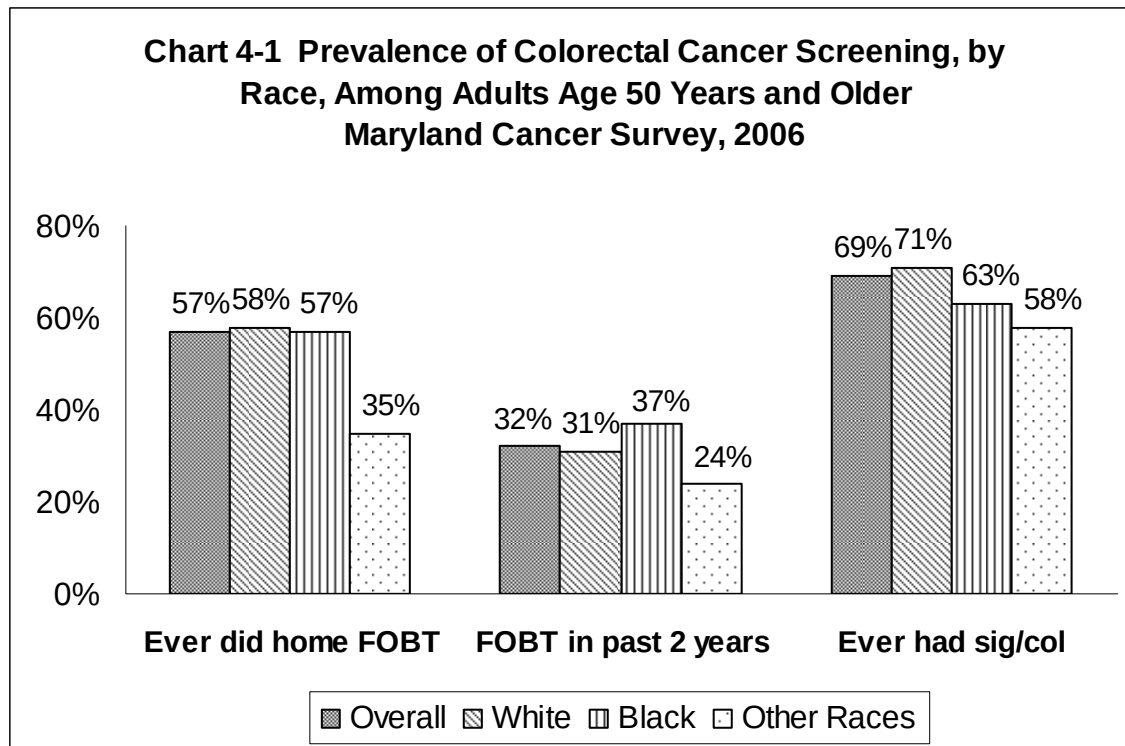
- The doctor had not ordered the test or didn't say they needed it (29%)
- No reason, or the respondent never thought about it (20%)
- The respondent had another type of CRC screening test (19%)
- Respondent didn't know he/she needed this type of test (16%)
- Respondent reported he/she wasn't having any problems (8%)

The HP 2010 goal is for 33% of people age 50 years and older to have an FOBT in the last 2 years.<sup>4</sup>

- Thirty-two percent (32%) of Marylanders age 50 years and older reported having an FOBT within the preceding 2 years (Table 4-7 and Chart 4-1). Significant differences were noted by gender, age, race, and employment status.
- People age 65 years and older were more likely to have performed a home FOBT in the past 2 years than those age 50-64 years (38% vs. 28%).
- A higher proportion of African Americans than persons of all other races reported performing the home FOBT in the past 2 years.

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<sup>4</sup> U.S. Department of Health and Human Services. Healthy People 2010 Midcourse Review. Washington, DC; 2006. Available at <http://www.healthypeople.gov/data/midcourse/default.htm#pubs>. Last accessed July 11, 2007.



#### Prevalence of CRC Screening with Lower GI Endoscopy

Sigmoidoscopy and colonoscopy are tests in which the large bowel is examined with a narrow, lighted tube inserted in the rectum. During a sigmoidoscopy, only the lower third of the colon (closest to the rectum) is examined; during a colonoscopy the entire colon is examined. These tests are generally referred to as “lower GI endoscopy.” HP 2010 has set 50% as the goal for the adult population age 50 years and older to have ever received a lower GI endoscopy.<sup>5</sup>

Among MCS respondents age 50 years and older,

- Sixty-nine percent (69%) reported that they have ever had a lower GI endoscopy (Table 4-8 and Chart 4-1).
- Respondents age 50 to 64 years less frequently reported ever having a lower GI endoscopic examination than those age 65 years and older (63% vs. 76%).
- Whites were significantly more likely to have ever had lower GI endoscopy (71%) than either African Americans (63%) or people of Other races (58%).
- Higher educational levels were statistically significantly associated with higher proportions of ever having a lower GI endoscopic examination.
- Prevalence of lower GI endoscopy was significantly higher among respondents at higher annual income levels.

<sup>5</sup> U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. Understanding and Improving Health; Objectives for Improving Health. Vol. I. Cancer. Washington, DC: U.S. Government Printing Office, November 2000. <http://www.healthypeople.gov/Document/HTML/Volume1/03Cancer.htm>. Last accessed July 9, 2007.



- Of those reporting they had ever had lower GI endoscopy, the vast majority of people (almost 98%) knew which test they had received most recently. Of those who could name their test, 10% reported their most recent exam was a sigmoidoscopy and 90% replied it was a colonoscopy. (Data not shown in tables.)

Respondents age 50 and older who never had a lower GI endoscopy or who were not up-to-date with endoscopic screening were asked the reason why (Table 4-9; more than one response could be given per respondent). The most frequently cited reasons were:

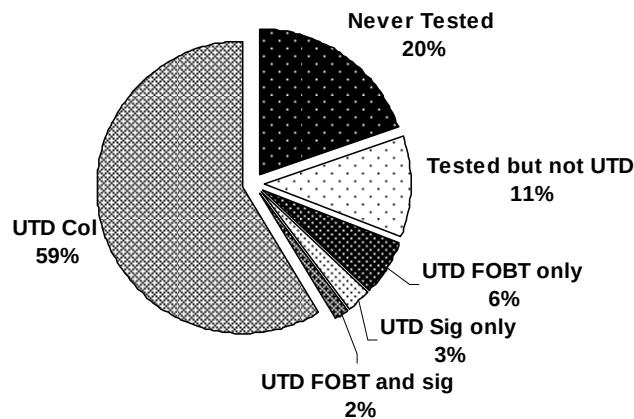
- The doctor did not order the test or say it was need (23%)
- No reason or the respondent never thought about it (19%)
- The respondent didn't know the test was needed (17%)
- The respondent has not had any problems (13%)

#### Compliance with CRC Screening Guidelines

The following is a summary of CRC screening frequency found in the MCS 2006. (Chart 4-2; data are not in tables.)

- Twenty percent (20%) of Marylanders over the age of 50 years reported never being screened by FOBT, sigmoidoscopy, or colonoscopy.
- Eleven percent (11%) have been tested with either FOBT and/or lower GI endoscopy, but are not up-to-date by ACS guidelines.
- Of those who have had CRC testing and knew the types of procedures they had and the time elapsed since the most recent tests:
  - o Six percent (6%) were up-to-date with FOBT only;
  - o Three percent (3%) were up-to-date with sigmoidoscopy only;
  - o Two percent (2%) had an FOBT in the last year and a sigmoidoscopy in the last 5 years; and
  - o Fifty-nine percent (59%) had a colonoscopy within the last 10 years (with or without ever having an FOBT).

**Chart 4-2 Summary of Up-to-Date (UTD)\* CRC Screening Among Respondents  
Age 50 Years and Older -- Maryland Cancer Survey, 2006**

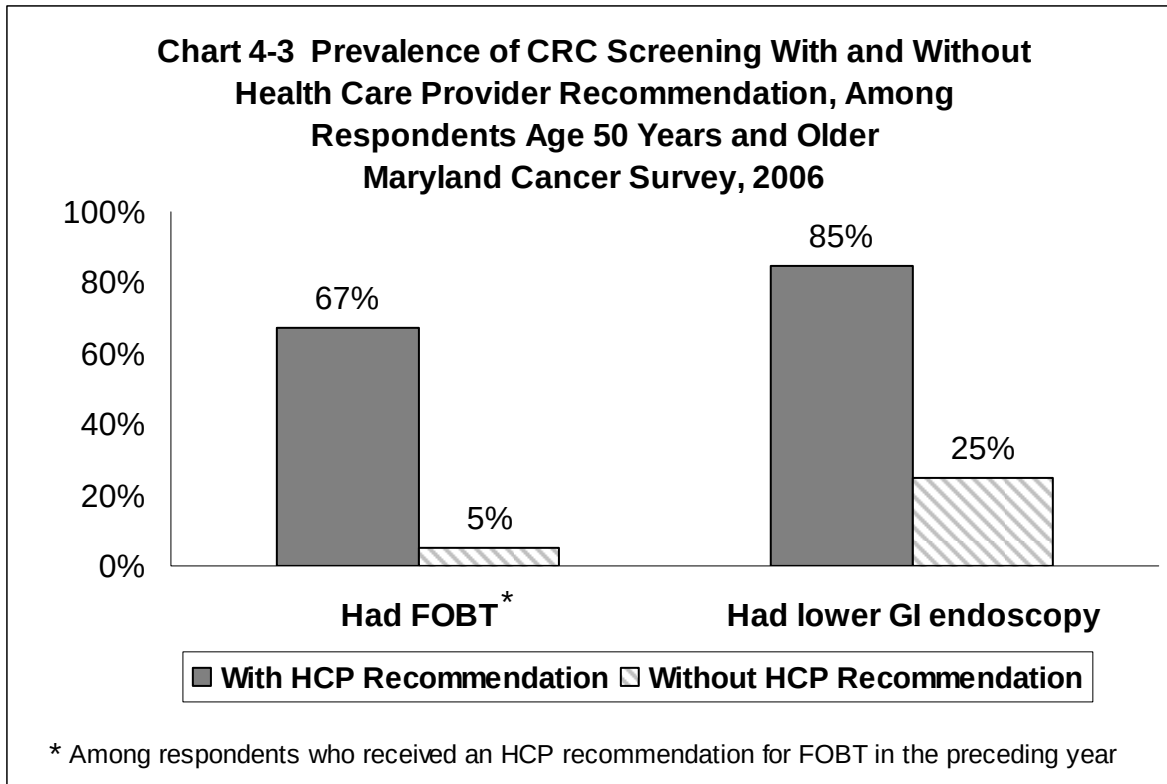


\* UTD by American Cancer Society recommendations

### HCP Recommendations and CRC Screening

Receiving a recommendation from an HCP is a critical first step in having CRC screening performed. The following is a summary of responses to questions about HCP recommendations for CRC screening among MCS participants age 50 years and older. (Data not shown in tables.)

- Of those who had visited a doctor in the preceding 12 months, 26% reported receiving a recommendation to perform the home FOBT.
  - When in the preceding year an HCP recommended that the respondent have an FOBT, 67% had the exam, compared to only 5% having the exam when no recommendation was made (Chart 4-3).
- Seventy-three percent (73%) of those age 50 years and older have ever received a recommendation to have lower GI endoscopy.
  - Among people who reported ever receiving a provider recommendation for lower GI endoscopy, 85% had the exam. Among those who said they did not receive a recommendation from an HCP, only 25% had the exam (Chart 4-3).
- Of the 31% of Marylanders age 50 years and older who have never had a lower GI endoscopy, 76% have had a routine check-up in the past year and 86% have had a routine check-up in the past 2 years.
- Of the 20% of Marylanders age 50 years and older who have never been tested by FOBT or lower GI endoscopy, 70% had a routine check-up in the past year and 81% had a routine check-up in the past 2 years.



Receiving a recommendation from an HCP is only the first step in having CRC screening. Respondents age 50 years and older who had received a recommendation from their HCP were asked whether the provider did anything else to help facilitate the scheduling or performance of the endoscopy (Table 4-10; more than one response could be given per respondent).

- Sixty-three percent (63%) said the HCP referred them to a doctor or place where the procedure could be done.
- Nineteen percent (19%) said the HCP's office called to make the appointment for them.
- Fourteen percent (14%) said the HCP only made a recommendation and did not do anything else.
- Thirteen percent (13%) said the HCP did the lower GI endoscopy exam him/herself.
- Seven percent (7%) said the HCP sent a letter or postcard or called the respondent to tell them to get the test done.

#### Family History of CRC and Prevalence of Screening Compliance

Having a first-degree relative (FDR) (e.g., brother, sister, parent, or child) diagnosed with CRC or adenomas puts one at increased risk for developing CRC and necessitates earlier and possibly more frequent screening with colonoscopy. The following summarizes CRC screening prevalence among MCS respondents, based on reported family history of CRC. (Data not shown in tables.)

- Eleven percent (11%) of people age 40 years and older reported they had an FDR who had been diagnosed with colon cancer. Among respondents age 50 years and older, 12% reported having a family history of CRC.

- Among people age 50 years and older who reported having an FDR with CRC, 83% have ever had a lower GI endoscopic examination. This figure was significantly lower among people who did not have an FDR with CRC; 67% of those without a family history of CRC reported ever having lower GI endoscopy.
- Of people age 50 years and older who reported having an FDR with CRC, who have ever had a lower GI endoscopy, and who knew the specific type of exam, 93% said their most recent exam was a colonoscopy.
- Among people between the ages of 40 and 49 years, only 39% of those who reported having an FDR with CRC have ever had a lower GI endoscopy; of these respondents, 88% reported having a colonoscopy as their most recent exam.

**TABLE 4-1. RESPONDENTS REPORTING TO KNOW THAT THERE ARE SCREENING TESTS FOR COLON CANCER,  
AMONG THOSE AGE 40 YEARS AND OLDER ~**

| Selected Characteristic                   | N    | n    | wt % | 95% CI | Stat Sig |
|-------------------------------------------|------|------|------|--------|----------|
| <b>Total Population</b>                   | 5133 | 4861 | 94%  | 93-95% |          |
| <b>Area of Residence</b>                  |      |      |      |        | **       |
| Urban                                     | 3062 | 2874 | 94%  | 93-95% |          |
| Rural                                     | 2071 | 1987 | 95%  | 94-97% |          |
| <b>Gender</b>                             |      |      |      |        | ^        |
| Male                                      | 1907 | 1793 | 93%  | 92-95% |          |
| Female                                    | 3226 | 3068 | 95%  | 94-96% |          |
| <b>Age</b>                                |      |      |      |        | **       |
| 40-49 years                               | 1368 | 1274 | 93%  | 91-94% |          |
| 50-64 years                               | 2077 | 2002 | 96%  | 95-97% |          |
| 65 years and older                        | 1688 | 1585 | 94%  | 92-95% |          |
| <b>Race</b>                               |      |      |      |        | **       |
| White                                     | 4115 | 3944 | 96%  | 95-96% |          |
| African American or Black                 | 830  | 758  | 91%  | 88-93% |          |
| Other                                     | 188  | 159  | 88%  | 82-93% |          |
| <b>Gender and Race</b>                    |      |      |      |        | **       |
| White male                                | 1595 | 1517 | 95%  | 94-96% |          |
| African American male                     | 241  | 216  | 89%  | 85-94% |          |
| Other male                                | 71   | 60   | 87%  | 77-96% |          |
| White female                              | 2520 | 2427 | 96%  | 95-97% |          |
| African American female                   | 589  | 542  | 92%  | 89-94% |          |
| Other female                              | 117  | 99   | 88%  | 82-95% |          |
| <b>Marital Status</b>                     |      |      |      |        | **       |
| Married or partner of<br>unmarried couple | 3065 | 2930 | 95%  | 94-96% |          |
| Divorced or separated                     | 885  | 837  | 94%  | 93-96% |          |
| Widowed                                   | 765  | 710  | 92%  | 89-95% |          |
| Never married                             | 401  | 369  | 91%  | 87-94% |          |
| <b>Education</b>                          |      |      |      |        | **       |
| Less than high school                     | 411  | 355  | 87%  | 83-91% |          |
| High school grad or GED                   | 1413 | 1325 | 93%  | 91-95% |          |
| College 1-3 years                         | 1239 | 1184 | 95%  | 93-96% |          |
| College grad                              | 1105 | 1066 | 96%  | 94-98% |          |
| Advanced degree                           | 953  | 922  | 96%  | 94-97% |          |
| <b>Employment Status</b>                  |      |      |      |        | ^        |
| Employed for wages                        | 2291 | 2193 | 95%  | 93-96% |          |
| Self-employed                             | 436  | 417  | 95%  | 92-97% |          |
| Retired                                   | 1724 | 1624 | 94%  | 93-95% |          |
| Other                                     | 667  | 613  | 92%  | 89-94% |          |
| <b>Household Income</b>                   |      |      |      |        | **       |
| <\$25,000                                 | 863  | 775  | 90%  | 87-92% |          |
| \$25,000-<\$35,000                        | 450  | 419  | 92%  | 88-95% |          |
| \$35,000-<\$50,000                        | 621  | 592  | 93%  | 91-96% |          |
| \$50,000-<\$75,000                        | 748  | 720  | 95%  | 92-97% |          |
| \$75,000 or greater                       | 1679 | 1631 | 97%  | 95-98% |          |
| Don't know/not sure                       | 317  | 289  | 91%  | 87-95% |          |
| Refused                                   | 455  | 435  | 95%  | 92-97% |          |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq 0.05$

\* p-value  $> 0.05 - 0.1$

^ p-value  $> 0.1$

**TABLE 4-2. RESPONSES TO THE QUESTION, "CAN YOU THINK OF ANY TESTS THAT FIND OR DETECT COLON CANCER?" AMONG PARTICIPANTS AGE 40 YEARS AND OLDER \***

| <b>Selected Response</b> | <b>wt %</b> |
|--------------------------|-------------|
| Colonoscopy              | 61%         |
| No/nothing               | 26%         |
| Fecal occult blood test  | 16%         |
| Sigmoidoscopy            | 9%          |
| Blood test               | 3%          |
| Digital rectal exam      | 3%          |
| MRI/scans/CAT scans      | 2%          |
| Barium enema             | 1%          |
| Proctoscopy              | 1%          |
| Invalid response         | 1%          |
| Other                    | 2%          |

\* More than one response could be given per respondent.

**TABLE 4-3. RESPONSES TO QUESTIONS ABOUT AWARENESS OF TESTS FOR COLORECTAL CANCER SCREENING,  
AMONG PARTICIPANTS AGE 40 YEARS AND OLDER**

|                                | Heard of the home kit to test for blood in the stool ~ |          |             |               |                 | Heard of tests called sigmoidoscopy or colonoscopy ~ |          |             |               |                 |
|--------------------------------|--------------------------------------------------------|----------|-------------|---------------|-----------------|------------------------------------------------------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b>                                               | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b>                                             | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Total Population</b>        | 5115                                                   | 4045     | 77%         | 76-79%        |                 | 5126                                                 | 4778     | 92%         | 91-93%        |                 |
| <b>Area of Residence</b>       | ^                                                      |          |             |               |                 | ^                                                    |          |             |               |                 |
| Urban                          | 3050                                                   | 2434     | 78%         | 76-79%        |                 | 3059                                                 | 2850     | 92%         | 91-93%        |                 |
| Rural                          | 2065                                                   | 1611     | 75%         | 73-78%        |                 | 2067                                                 | 1928     | 93%         | 91-94%        |                 |
| <b>Gender</b>                  | **                                                     |          |             |               |                 | **                                                   |          |             |               |                 |
| Male                           | 1900                                                   | 1425     | 73%         | 71-76%        |                 | 1904                                                 | 1736     | 91%         | 89-93%        |                 |
| Female                         | 3215                                                   | 2620     | 80%         | 79-82%        |                 | 3222                                                 | 3042     | 93%         | 92-94%        |                 |
| <b>Age</b>                     | **                                                     |          |             |               |                 | **                                                   |          |             |               |                 |
| 40-49 years                    | 1363                                                   | 889      | 65%         | 62-68%        |                 | 1369                                                 | 1228     | 88%         | 86-90%        |                 |
| 50-64 years                    | 2064                                                   | 1718     | 83%         | 81-85%        |                 | 2073                                                 | 1974     | 95%         | 93-96%        |                 |
| 65 years and older             | 1688                                                   | 1438     | 86%         | 84-88%        |                 | 1684                                                 | 1576     | 94%         | 93-95%        |                 |
| <b>Race</b>                    | **                                                     |          |             |               |                 | **                                                   |          |             |               |                 |
| White                          | 4096                                                   | 3317     | 80%         | 78-81%        |                 | 4107                                                 | 3923     | 96%         | 95-96%        |                 |
| African American or Black      | 832                                                    | 610      | 72%         | 68-76%        |                 | 831                                                  | 711      | 85%         | 82-88%        |                 |
| Other                          | 187                                                    | 118      | 65%         | 56-73%        |                 | 188                                                  | 144      | 78%         | 71-85%        |                 |
| <b>Gender and Race</b>         | **                                                     |          |             |               |                 | **                                                   |          |             |               |                 |
| White male                     | 1590                                                   | 1225     | 76%         | 73-79%        |                 | 1591                                                 | 1490     | 94%         | 93-96%        |                 |
| African American male          | 240                                                    | 162      | 68%         | 61-75%        |                 | 241                                                  | 195      | 83%         | 78-88%        |                 |
| Other male                     | 70                                                     | 38       | 60%         | 45-74%        |                 | 72                                                   | 51       | 75%         | 63-88%        |                 |
| White female                   | 2506                                                   | 2092     | 83%         | 81-85%        |                 | 2516                                                 | 2433     | 97%         | 96-98%        |                 |
| African American female        | 592                                                    | 448      | 75%         | 71-79%        |                 | 590                                                  | 516      | 87%         | 84-90%        |                 |
| Other female                   | 117                                                    | 80       | 68%         | 59-78%        |                 | 116                                                  | 93       | 80%         | 71-89%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 4-3. RESPONSES TO QUESTIONS ABOUT AWARENESS OF TESTS FOR COLORECTAL CANCER SCREENING,  
AMONG PARTICIPANTS AGE 40 YEARS AND OLDER**

|                                        | Heard of the home kit to test for blood in the stool ~ |          |             |               |                 | Heard of tests called sigmoidoscopy or colonoscopy ~ |          |             |               |                 |
|----------------------------------------|--------------------------------------------------------|----------|-------------|---------------|-----------------|------------------------------------------------------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b>                                               | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b>                                             | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Marital Status</b>                  | <b>**</b>                                              |          |             |               |                 | <b>**</b>                                            |          |             |               |                 |
| Married or partner of unmarried couple | 3052                                                   | 2450     | 78%         | 77-80%        |                 | 3068                                                 | 2905     | 94%         | 93-95%        |                 |
| Divorced or separated                  | 882                                                    | 674      | 74%         | 70-78%        |                 | 882                                                  | 806      | 89%         | 86-92%        |                 |
| Widowed                                | 764                                                    | 628      | 83%         | 80-86%        |                 | 759                                                  | 706      | 93%         | 90-95%        |                 |
| Never married                          | 402                                                    | 280      | 64%         | 58-70%        |                 | 401                                                  | 348      | 84%         | 79-89%        |                 |
| <b>Education</b>                       | <b>**</b>                                              |          |             |               |                 | <b>**</b>                                            |          |             |               |                 |
| Less than high school                  | 409                                                    | 273      | 66%         | 59-72%        |                 | 407                                                  | 321      | 77%         | 71-83%        |                 |
| High school grad or GED                | 1411                                                   | 1073     | 74%         | 72-77%        |                 | 1413                                                 | 1296     | 90%         | 88-92%        |                 |
| College 1-3 years                      | 1230                                                   | 991      | 79%         | 76-82%        |                 | 1232                                                 | 1159     | 93%         | 91-95%        |                 |
| College grad                           | 1102                                                   | 888      | 77%         | 74-81%        |                 | 1107                                                 | 1065     | 95%         | 94-97%        |                 |
| Advanced degree                        | 951                                                    | 809      | 82%         | 78-85%        |                 | 955                                                  | 927      | 96%         | 95-98%        |                 |
| <b>Employment Status</b>               | <b>**</b>                                              |          |             |               |                 | <b>**</b>                                            |          |             |               |                 |
| Employed for wages                     | 2279                                                   | 1746     | 74%         | 72-76%        |                 | 2290                                                 | 2147     | 92%         | 91-94%        |                 |
| Self-employed                          | 436                                                    | 322      | 72%         | 67-77%        |                 | 437                                                  | 411      | 93%         | 90-96%        |                 |
| Retired                                | 1719                                                   | 1477     | 86%         | 84-88%        |                 | 1717                                                 | 1625     | 95%         | 93-96%        |                 |
| Other                                  | 666                                                    | 487      | 73%         | 69-77%        |                 | 667                                                  | 582      | 87%         | 84-90%        |                 |
| <b>Household Income</b>                | <b>**</b>                                              |          |             |               |                 | <b>**</b>                                            |          |             |               |                 |
| <\$25,000                              | 863                                                    | 638      | 73%         | 69-77%        |                 | 858                                                  | 750      | 86%         | 83-89%        |                 |
| \$25,000-<\$35,000                     | 451                                                    | 353      | 72%         | 66-78%        |                 | 453                                                  | 406      | 85%         | 79-90%        |                 |
| \$35,000-<\$50,000                     | 615                                                    | 491      | 77%         | 73-82%        |                 | 619                                                  | 578      | 92%         | 89-94%        |                 |
| \$50,000-<\$75,000                     | 744                                                    | 580      | 77%         | 73-80%        |                 | 748                                                  | 710      | 92%         | 90-95%        |                 |
| \$75,000 or greater                    | 1673                                                   | 1369     | 80%         | 77-82%        |                 | 1680                                                 | 1630     | 97%         | 96-98%        |                 |
| Don't know/not sure                    | 318                                                    | 239      | 73%         | 66-79%        |                 | 313                                                  | 271      | 84%         | 78-90%        |                 |
| Refused                                | 451                                                    | 375      | 81%         | 76-86%        |                 | 455                                                  | 433      | 94%         | 91-97%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1



**TABLE 4-4. RESPONSES TO QUESTIONS ON AWARENESS OF MEDIA PROMOTION OF CRC SCREENING AND NO-COST SCREENING PROGRAMS, AMONG PARTICIPANTS AGE 40 YEARS AND OLDER**

|                           | Saw or heard colon cancer screening being promoted on TV, radio, in a health care facility, or in a magazine, newspaper or some place else ~ |      |      |        |          | Awareness of no cost colon cancer screening programs at health department ~ |      |      |        |          |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------|------|--------|----------|-----------------------------------------------------------------------------|------|------|--------|----------|
| Selected Characteristic   | N                                                                                                                                            | n    | wt % | 95% CI | Stat Sig | N                                                                           | n    | wt % | 95% CI | Stat Sig |
| <b>Total Population</b>   | 5047                                                                                                                                         | 4359 | 86%  | 85-87% |          | 5090                                                                        | 1376 | 25%  | 24-27% |          |
| <b>Area of Residence</b>  | ^                                                                                                                                            |      |      |        |          | **                                                                          |      |      |        |          |
| Urban                     | 3003                                                                                                                                         | 2580 | 86%  | 84-87% |          | 3029                                                                        | 754  | 24%  | 22-26% |          |
| Rural                     | 2044                                                                                                                                         | 1779 | 87%  | 86-89% |          | 2061                                                                        | 622  | 28%  | 26-31% |          |
| <b>Gender</b>             | **                                                                                                                                           |      |      |        |          | **                                                                          |      |      |        |          |
| Male                      | 1860                                                                                                                                         | 1537 | 83%  | 81-85% |          | 1888                                                                        | 438  | 23%  | 21-26% |          |
| Female                    | 3187                                                                                                                                         | 2822 | 89%  | 87-90% |          | 3202                                                                        | 938  | 27%  | 25-28% |          |
| <b>Age</b>                | *                                                                                                                                            |      |      |        |          | **                                                                          |      |      |        |          |
| 40-49 years               | 1354                                                                                                                                         | 1163 | 85%  | 82-87% |          | 1361                                                                        | 284  | 19%  | 16-21% |          |
| 50-64 years               | 2041                                                                                                                                         | 1809 | 88%  | 86-89% |          | 2058                                                                        | 540  | 26%  | 24-28% |          |
| 65 years and older        | 1652                                                                                                                                         | 1387 | 85%  | 83-87% |          | 1671                                                                        | 552  | 33%  | 30-36% |          |
| <b>Race</b>               | **                                                                                                                                           |      |      |        |          | ^                                                                           |      |      |        |          |
| White                     | 4036                                                                                                                                         | 3504 | 86%  | 85-88% |          | 4082                                                                        | 1117 | 25%  | 23-26% |          |
| African American or Black | 826                                                                                                                                          | 719  | 87%  | 84-90% |          | 821                                                                         | 223  | 26%  | 22-30% |          |
| Other                     | 185                                                                                                                                          | 136  | 75%  | 68-83% |          | 187                                                                         | 36   | 21%  | 14-29% |          |
| <b>Gender and Race</b>    | **                                                                                                                                           |      |      |        |          | ^                                                                           |      |      |        |          |
| White male                | 1554                                                                                                                                         | 1286 | 83%  | 80-85% |          | 1579                                                                        | 371  | 22%  | 20-25% |          |
| African American male     | 235                                                                                                                                          | 201  | 85%  | 79-90% |          | 238                                                                         | 55   | 26%  | 19-33% |          |
| Other male                | 71                                                                                                                                           | 50   | 77%  | 65-88% |          | 71                                                                          | 12   | 23%  | 10-37% |          |
| White female              | 2482                                                                                                                                         | 2218 | 90%  | 88-91% |          | 2503                                                                        | 746  | 27%  | 25-29% |          |
| African American female   | 591                                                                                                                                          | 518  | 89%  | 86-91% |          | 583                                                                         | 168  | 26%  | 22-30% |          |
| Other female              | 114                                                                                                                                          | 86   | 74%  | 64-83% |          | 116                                                                         | 24   | 19%  | 11-28% |          |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq 0.05$

\* p-value  $> 0.05 - 0.1$

^ p-value  $> 0.1$

**TABLE 4-4. RESPONSES TO QUESTIONS ON AWARENESS OF MEDIA PROMOTION OF CRC SCREENING AND NO-COST SCREENING PROGRAMS, AMONG PARTICIPANTS AGE 40 YEARS AND OLDER**

|                                        | Saw or heard colon cancer screening being promoted on TV, radio, in a health care facility, or in a magazine, newspaper or some place else ~ |      |      |        |          | Awareness of no cost colon cancer screening programs at health department ~ |     |      |        |          |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------|------|--------|----------|-----------------------------------------------------------------------------|-----|------|--------|----------|
| Selected Characteristic                | N                                                                                                                                            | n    | wt % | 95% CI | Stat Sig | N                                                                           | n   | wt % | 95% CI | Stat Sig |
| <b>Marital Status</b>                  | ^                                                                                                                                            |      |      |        |          | **                                                                          |     |      |        |          |
| Married or partner of unmarried couple | 3011                                                                                                                                         | 2622 | 86%  | 84-88% |          | 3047                                                                        | 790 | 24%  | 23-26% |          |
| Divorced or separated                  | 875                                                                                                                                          | 754  | 87%  | 84-90% |          | 874                                                                         | 220 | 23%  | 19-26% |          |
| Widowed                                | 754                                                                                                                                          | 639  | 85%  | 81-88% |          | 756                                                                         | 270 | 36%  | 32-40% |          |
| Never married                          | 392                                                                                                                                          | 334  | 87%  | 83-91% |          | 397                                                                         | 93  | 23%  | 18-28% |          |
| <b>Education</b>                       | **                                                                                                                                           |      |      |        |          | **                                                                          |     |      |        |          |
| Less than high school                  | 407                                                                                                                                          | 337  | 84%  | 80-89% |          | 407                                                                         | 134 | 29%  | 23-34% |          |
| High school grad or GED                | 1398                                                                                                                                         | 1205 | 86%  | 84-88% |          | 1407                                                                        | 434 | 29%  | 26-32% |          |
| College 1-3 years                      | 1215                                                                                                                                         | 1088 | 90%  | 87-92% |          | 1228                                                                        | 340 | 28%  | 24-31% |          |
| College grad                           | 1081                                                                                                                                         | 919  | 83%  | 80-86% |          | 1092                                                                        | 257 | 21%  | 18-24% |          |
| Advanced degree                        | 936                                                                                                                                          | 803  | 85%  | 83-88% |          | 945                                                                         | 208 | 19%  | 16-22% |          |
| <b>Employment Status</b>               | ^                                                                                                                                            |      |      |        |          | **                                                                          |     |      |        |          |
| Employed for wages                     | 2259                                                                                                                                         | 1998 | 87%  | 85-89% |          | 2275                                                                        | 556 | 23%  | 20-25% |          |
| Self-employed                          | 425                                                                                                                                          | 359  | 84%  | 80-88% |          | 433                                                                         | 86  | 19%  | 14-24% |          |
| Retired                                | 1689                                                                                                                                         | 1440 | 86%  | 84-88% |          | 1700                                                                        | 548 | 32%  | 29-35% |          |
| Other                                  | 661                                                                                                                                          | 552  | 84%  | 80-88% |          | 667                                                                         | 183 | 25%  | 20-30% |          |
| <b>Household Income</b>                | ^                                                                                                                                            |      |      |        |          | **                                                                          |     |      |        |          |
| <\$25,000                              | 858                                                                                                                                          | 714  | 82%  | 79-86% |          | 859                                                                         | 281 | 29%  | 25-33% |          |
| \$25,000-<\$35,000                     | 444                                                                                                                                          | 376  | 87%  | 83-91% |          | 449                                                                         | 132 | 28%  | 23-34% |          |
| \$35,000-<\$50,000                     | 609                                                                                                                                          | 532  | 87%  | 84-90% |          | 611                                                                         | 175 | 29%  | 25-34% |          |
| \$50,000-<\$75,000                     | 736                                                                                                                                          | 655  | 88%  | 86-91% |          | 738                                                                         | 209 | 26%  | 22-29% |          |
| \$75,000 or greater                    | 1643                                                                                                                                         | 1435 | 87%  | 84-89% |          | 1669                                                                        | 341 | 19%  | 17-21% |          |
| Don't know/not sure                    | 314                                                                                                                                          | 264  | 85%  | 80-89% |          | 315                                                                         | 92  | 30%  | 23-36% |          |
| Refused                                | 443                                                                                                                                          | 383  | 85%  | 80-89% |          | 449                                                                         | 146 | 34%  | 27-41% |          |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 4-5. PEOPLE REPORTING TO HAVE EVER PERFORMED A HOME FOBT, AMONG PARTICIPANTS AGE 50 YEARS AND OLDER**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Total Population</b>        | 3742     | 2148     | 57%         | 55-59%        |                 | 2209     | 1314     | 58%         | 56-61%        |                 | 1533     | 834      | 52%         | 50-55%        |                 |
| <b>Gender</b>                  | ^        |          |             |               |                 | ^        |          |             |               |                 | ^        |          |             |               |                 |
| Male                           | 1370     | 781      | 58%         | 54-61%        |                 | 787      | 476      | 60%         | 56-64%        |                 | 583      | 305      | 50%         | 46-55%        |                 |
| Female                         | 2372     | 1367     | 57%         | 54-59%        |                 | 1422     | 838      | 57%         | 54-60%        |                 | 950      | 529      | 54%         | 51-58%        |                 |
| <b>Age</b>                     | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| 50-64 years                    | 2061     | 1055     | 51%         | 49-54%        |                 | 1241     | 651      | 52%         | 49-56%        |                 | 820      | 404      | 47%         | 43-51%        |                 |
| 65 years and older             | 1681     | 1093     | 66%         | 63-69%        |                 | 968      | 663      | 67%         | 64-71%        |                 | 713      | 430      | 60%         | 56-64%        |                 |
| <b>Race</b>                    | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| White                          | 3076     | 1794     | 58%         | 56-60%        |                 | 1672     | 1026     | 60%         | 57-63%        |                 | 1404     | 768      | 53%         | 50-56%        |                 |
| African American or Black      | 560      | 316      | 57%         | 52-62%        |                 | 457      | 261      | 58%         | 53-64%        |                 | 103      | 55       | 49%         | 36-61%        |                 |
| Other                          | 106      | 38       | 35%         | 24-46%        |                 | 80       | 27       | 34%         | 22-45%        |                 | 26       | 11       | 49%         | 25-73%        |                 |
| <b>Gender and Race</b>         | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| White male                     | 1179     | 677      | 58%         | 55-61%        |                 | 633      | 392      | 61%         | 57-65%        |                 | 546      | 285      | 50%         | 46-55%        |                 |
| African American male          | 151      | 89       | 60%         | 51-69%        |                 | 128      | 76       | 61%         | 52-71%        |                 | 23       | 13       | 51%         | 26-76%        |                 |
| Other male                     | 40       | 15       | 33%         | 14-51%        |                 | 26       | 8        | 31%         | 12-51%        |                 | 14       | 7        | 50%         | 17-83%        |                 |
| White female                   | 1897     | 1117     | 58%         | 56-61%        |                 | 1039     | 634      | 59%         | 56-62%        |                 | 858      | 483      | 55%         | 52-59%        |                 |
| African American female        | 409      | 227      | 55%         | 50-61%        |                 | 329      | 185      | 56%         | 50-62%        |                 | 80       | 42       | 47%         | 34-60%        |                 |
| Other female                   | 66       | 23       | 36%         | 23-50%        |                 | 54       | 19       | 36%         | 22-50%        |                 | 12       | 4        | 48%         | 13-82%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq 0.05$

\* p-value  $> 0.05 - 0.1$

^ p-value  $> 0.1$

Maryland Cancer Survey, 2006

**TABLE 4-5. PEOPLE REPORTING TO HAVE EVER PERFORMED A HOME FOBT, AMONG PARTICIPANTS AGE 50 YEARS AND OLDER**

|                                           | TOTAL ~ |      |      |        |          | URBAN ~ |     |      |        |          | RURAL ~ |     |      |        |          |
|-------------------------------------------|---------|------|------|--------|----------|---------|-----|------|--------|----------|---------|-----|------|--------|----------|
| Selected Characteristic                   | N       | n    | wt % | 95% CI | Stat Sig | N       | n   | wt % | 95% CI | Stat Sig | N       | n   | wt % | 95% CI | Stat Sig |
| <b>Marital Status</b>                     | *       |      |      |        |          | ^       |     |      |        |          | **      |     |      |        |          |
| Married or partner of<br>unmarried couple | 2111    | 1218 | 58%  | 55-60% |          | 1203    | 729 | 60%  | 56-63% |          | 908     | 489 | 52%  | 48-55% |          |
| Divorced or separated                     | 653     | 358  | 51%  | 47-56% |          | 407     | 227 | 52%  | 47-58% |          | 246     | 131 | 47%  | 40-55% |          |
| Widowed                                   | 738     | 444  | 60%  | 55-64% |          | 421     | 257 | 59%  | 54-65% |          | 317     | 187 | 61%  | 56-67% |          |
| Never married                             | 231     | 123  | 55%  | 47-63% |          | 169     | 96  | 56%  | 47-65% |          | 62      | 27  | 49%  | 34-64% |          |
| <b>Education</b>                          | **      |      |      |        |          | **      |     |      |        |          | **      |     |      |        |          |
| Less than high school                     | 339     | 151  | 42%  | 36-49% |          | 174     | 80  | 43%  | 34-51% |          | 165     | 71  | 42%  | 34-51% |          |
| High school grad or GED                   | 1072    | 575  | 54%  | 51-58% |          | 507     | 290 | 57%  | 52-62% |          | 565     | 285 | 48%  | 44-53% |          |
| College 1-3 years                         | 884     | 539  | 61%  | 57-65% |          | 509     | 324 | 63%  | 58-68% |          | 375     | 215 | 54%  | 48-60% |          |
| College grad                              | 726     | 440  | 59%  | 55-64% |          | 497     | 297 | 59%  | 54-64% |          | 229     | 143 | 62%  | 56-69% |          |
| Advanced degree                           | 711     | 438  | 60%  | 56-64% |          | 515     | 318 | 61%  | 56-65% |          | 196     | 120 | 59%  | 51-67% |          |
| <b>Employment Status</b>                  | **      |      |      |        |          | **      |     |      |        |          | **      |     |      |        |          |
| Employed for wages                        | 1321    | 673  | 50%  | 47-54% |          | 824     | 441 | 52%  | 48-56% |          | 497     | 232 | 44%  | 39-49% |          |
| Self-employed                             | 280     | 150  | 53%  | 46-60% |          | 175     | 90  | 53%  | 44-61% |          | 105     | 60  | 55%  | 45-65% |          |
| Retired                                   | 1699    | 1107 | 67%  | 64-69% |          | 959     | 654 | 68%  | 65-72% |          | 740     | 453 | 61%  | 57-65% |          |
| Other                                     | 433     | 213  | 48%  | 42-54% |          | 243     | 125 | 50%  | 43-57% |          | 190     | 88  | 44%  | 35-52% |          |
| <b>Household Income</b>                   | **      |      |      |        |          | **      |     |      |        |          | ^       |     |      |        |          |
| <\$25,000                                 | 708     | 367  | 49%  | 45-54% |          | 370     | 195 | 49%  | 43-55% |          | 338     | 172 | 51%  | 45-57% |          |
| \$25,000-<\$35,000                        | 361     | 223  | 61%  | 54-67% |          | 198     | 123 | 61%  | 53-69% |          | 163     | 100 | 60%  | 52-68% |          |
| \$35,000-<\$50,000                        | 470     | 276  | 59%  | 53-64% |          | 263     | 170 | 62%  | 55-69% |          | 207     | 106 | 49%  | 42-57% |          |
| \$50,000-<\$75,000                        | 512     | 289  | 55%  | 49-60% |          | 295     | 171 | 57%  | 50-63% |          | 217     | 118 | 48%  | 40-56% |          |
| \$75,000 or greater                       | 1044    | 621  | 59%  | 56-63% |          | 700     | 425 | 61%  | 57-65% |          | 344     | 196 | 54%  | 48-60% |          |
| Don't know/not sure                       | 273     | 144  | 56%  | 49-63% |          | 148     | 81  | 58%  | 49-67% |          | 125     | 63  | 51%  | 41-61% |          |
| Refused                                   | 374     | 228  | 60%  | 54-66% |          | 235     | 149 | 61%  | 54-68% |          | 139     | 79  | 57%  | 46-68% |          |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 4-6. RESPONSES TO THE QUESTION "WHAT WAS THE MOST IMPORTANT REASON YOU HAVE NEVER DONE/NOT DONE A HOME FOBT IN THE PAST YEAR?" \***

| <b>Selected Response</b>                               | <b>wt %</b> |
|--------------------------------------------------------|-------------|
| Doctor didn't order it/didn't say I needed it          | 29%         |
| No reason, never thought about it                      | 20%         |
| Had another type of colorectal exam                    | 19%         |
| Didn't need it/ didn't know I needed this type of test | 16%         |
| Haven't had any problems                               | 8%          |
| Never heard of the test                                | 5%          |
| Had blood stool test done at doctor's office           | 4%          |
| Put it off/didn't get around to it                     | 4%          |
| Too painful, unpleasant, or embarrassing               | 2%          |
| Other reasons                                          | 7%          |

\*Question asked of 2,949 participants age 50 years or older who reported they have never had or had not done a home blood stool test in the past year. More than one response could be given per respondent.

**TABLE 4-7. PEOPLE REPORTING TO HAVE PERFORMED A HOME FOBT WITHIN PAST 2 YEARS,  
AMONG PARTICIPANTS AGE 50 YEARS AND OLDER**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Total Population</b>        | 3742     | 1166     | 32%         | 30-34%        |                 | 2209     | 726      | 33%         | 31-35%        |                 | 1533     | 440      | 28%         | 25-30%        |                 |
| <b>Gender</b>                  | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| Male                           | 1370     | 463      | 35%         | 32-38%        |                 | 787      | 290      | 37%         | 33-41%        |                 | 583      | 173      | 29%         | 24-33%        |                 |
| Female                         | 2372     | 703      | 29%         | 27-32%        |                 | 1422     | 436      | 30%         | 27-33%        |                 | 950      | 267      | 27%         | 24-30%        |                 |
| <b>Age</b>                     | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| 50-64 years                    | 2061     | 559      | 28%         | 26-31%        |                 | 1241     | 360      | 30%         | 27-33%        |                 | 820      | 199      | 24%         | 20-27%        |                 |
| 65 years and older             | 1681     | 607      | 38%         | 35-41%        |                 | 968      | 366      | 39%         | 35-42%        |                 | 713      | 241      | 34%         | 30-37%        |                 |
| <b>Race</b>                    | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| White                          | 3076     | 943      | 31%         | 29-33%        |                 | 1672     | 547      | 32%         | 30-35%        |                 | 1404     | 396      | 27%         | 25-30%        |                 |
| African American or Black      | 560      | 197      | 37%         | 32-42%        |                 | 457      | 161      | 38%         | 32-43%        |                 | 103      | 36       | 34%         | 21-47%        |                 |
| Other                          | 106      | 26       | 24%         | 14-34%        |                 | 80       | 18       | 23%         | 13-34%        |                 | 26       | 8        | 31%         | 10-52%        |                 |
| <b>Gender and Race</b>         | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| White male                     | 1179     | 385      | 33%         | 30-36%        |                 | 633      | 227      | 35%         | 31-39%        |                 | 546      | 158      | 27%         | 23-31%        |                 |
| African American male          | 151      | 66       | 44%         | 35-54%        |                 | 128      | 56       | 45%         | 35-54%        |                 | 23       | 10       | 41%         | 16-66%        |                 |
| Other male                     | 40       | 12       | 29%         | 11-47%        |                 | 26       | 7        | 29%         | 9-48%         |                 | 14       | 5        | 39%         | 7-71%         |                 |
| White female                   | 1897     | 558      | 29%         | 27-31%        |                 | 1039     | 320      | 30%         | 27-33%        |                 | 858      | 238      | 27%         | 24-30%        |                 |
| African American female        | 409      | 131      | 32%         | 27-38%        |                 | 329      | 105      | 33%         | 27-38%        |                 | 80       | 26       | 29%         | 18-40%        |                 |
| Other female                   | 66       | 14       | 20%         | 10-30%        |                 | 54       | 11       | 20%         | 9-31%         |                 | 12       | 3        | 25%         | 0-53%         |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 4-7. PEOPLE REPORTING TO HAVE PERFORMED A HOME FOBT WITHIN PAST 2 YEARS,  
AMONG PARTICIPANTS AGE 50 YEARS AND OLDER**

|                                           | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|-------------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>            | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Marital Status</b>                     | ^        |          |             |               |                 | ^        |          |             |               |                 | ^        |          |             |               |                 |
| Married or partner of<br>unmarried couple | 2111     | 664      | 33%         | 30-35%        |                 | 1203     | 406      | 34%         | 31-37%        |                 | 908      | 258      | 28%         | 25-31%        |                 |
| Divorced or separated                     | 653      | 189      | 29%         | 24-33%        |                 | 407      | 118      | 30%         | 25-35%        |                 | 246      | 71       | 24%         | 18-30%        |                 |
| Widowed                                   | 738      | 243      | 33%         | 29-37%        |                 | 421      | 144      | 33%         | 29-38%        |                 | 317      | 99       | 32%         | 26-38%        |                 |
| Never married                             | 231      | 68       | 33%         | 25-41%        |                 | 169      | 56       | 34%         | 25-43%        |                 | 62       | 12       | 22%         | 10-35%        |                 |
| <b>Education</b>                          | ^        |          |             |               |                 | ^        |          |             |               |                 | ^        |          |             |               |                 |
| Less than high school                     | 339      | 90       | 26%         | 20-33%        |                 | 174      | 46       | 27%         | 18-35%        |                 | 165      | 44       | 26%         | 18-34%        |                 |
| High school grad or GED                   | 1072     | 304      | 30%         | 26-33%        |                 | 507      | 161      | 32%         | 27-37%        |                 | 565      | 143      | 25%         | 21-29%        |                 |
| College 1-3 years                         | 884      | 292      | 34%         | 30-37%        |                 | 509      | 175      | 35%         | 30-39%        |                 | 375      | 117      | 30%         | 25-35%        |                 |
| College grad                              | 726      | 244      | 35%         | 30-39%        |                 | 497      | 166      | 35%         | 30-40%        |                 | 229      | 78       | 33%         | 27-40%        |                 |
| Advanced degree                           | 711      | 232      | 33%         | 29-37%        |                 | 515      | 174      | 34%         | 29-38%        |                 | 196      | 58       | 29%         | 22-36%        |                 |
| <b>Employment Status</b>                  | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Employed for wages                        | 1321     | 368      | 28%         | 25-31%        |                 | 824      | 244      | 29%         | 25-32%        |                 | 497      | 124      | 24%         | 20-29%        |                 |
| Self-employed                             | 280      | 82       | 28%         | 21-35%        |                 | 175      | 48       | 28%         | 20-36%        |                 | 105      | 34       | 30%         | 21-39%        |                 |
| Retired                                   | 1699     | 598      | 38%         | 35-41%        |                 | 959      | 364      | 40%         | 37-44%        |                 | 740      | 234      | 32%         | 28-36%        |                 |
| Other                                     | 433      | 116      | 27%         | 22-32%        |                 | 243      | 68       | 28%         | 22-35%        |                 | 190      | 48       | 23%         | 17-30%        |                 |
| <b>Household Income</b>                   | ^        |          |             |               |                 | ^        |          |             |               |                 | ^        |          |             |               |                 |
| <\$25,000                                 | 708      | 216      | 30%         | 26-34%        |                 | 370      | 120      | 31%         | 26-36%        |                 | 338      | 96       | 27%         | 22-33%        |                 |
| \$25,000-<\$35,000                        | 361      | 127      | 37%         | 30-43%        |                 | 198      | 69       | 37%         | 29-45%        |                 | 163      | 58       | 35%         | 27-43%        |                 |
| \$35,000-<\$50,000                        | 470      | 139      | 32%         | 27-38%        |                 | 263      | 91       | 35%         | 29-42%        |                 | 207      | 48       | 22%         | 16-28%        |                 |
| \$50,000-<\$75,000                        | 512      | 153      | 30%         | 25-34%        |                 | 295      | 89       | 31%         | 25-37%        |                 | 217      | 64       | 27%         | 20-33%        |                 |
| \$75,000 or greater                       | 1044     | 334      | 33%         | 29-36%        |                 | 700      | 228      | 33%         | 29-37%        |                 | 344      | 106      | 29%         | 24-34%        |                 |
| Don't know/not sure                       | 273      | 76       | 32%         | 25-39%        |                 | 148      | 46       | 34%         | 25-43%        |                 | 125      | 30       | 25%         | 16-35%        |                 |
| Refused                                   | 374      | 121      | 33%         | 28-39%        |                 | 235      | 83       | 34%         | 27-41%        |                 | 139      | 38       | 31%         | 20-43%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 4-8. PEOPLE REPORTING TO HAVE EVER HAD A SIGMOIDOSCOPY OR COLONOSCOPY,  
AMONG PARTICIPANTS AGE 50 YEARS AND OLDER**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Total Population</b>        | 3748     | 2583     | 69%         | 67-70%        |                 | 2216     | 1564     | 69%         | 67-72%        |                 | 1532     | 1019     | 66%         | 63-69%        |                 |
| <b>Gender</b>                  | ^        |          |             |               |                 | ^        |          |             |               |                 | ^        |          |             |               |                 |
| Male                           | 1376     | 961      | 69%         | 66-72%        |                 | 792      | 574      | 70%         | 66-74%        |                 | 584      | 387      | 66%         | 61-70%        |                 |
| Female                         | 2372     | 1622     | 68%         | 66-70%        |                 | 1424     | 990      | 69%         | 66-71%        |                 | 948      | 632      | 66%         | 63-69%        |                 |
| <b>Age</b>                     | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| 50-64 years                    | 2068     | 1321     | 63%         | 61-66%        |                 | 1249     | 798      | 64%         | 61-67%        |                 | 819      | 523      | 63%         | 59-67%        |                 |
| 65 years and older             | 1680     | 1262     | 76%         | 74-79%        |                 | 967      | 766      | 78%         | 75-81%        |                 | 713      | 496      | 70%         | 67-74%        |                 |
| <b>Race</b>                    | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| White                          | 3085     | 2174     | 71%         | 69-73%        |                 | 1681     | 1230     | 72%         | 70-75%        |                 | 1404     | 944      | 67%         | 64-69%        |                 |
| African American or Black      | 559      | 352      | 63%         | 58-68%        |                 | 456      | 290      | 64%         | 59-69%        |                 | 103      | 62       | 59%         | 46-72%        |                 |
| Other                          | 104      | 57       | 58%         | 46-69%        |                 | 79       | 44       | 57%         | 45-69%        |                 | 25       | 13       | 65%         | 43-87%        |                 |
| <b>Gender and Race</b>         | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| White male                     | 1185     | 855      | 73%         | 70-76%        |                 | 637      | 486      | 75%         | 71-79%        |                 | 548      | 369      | 67%         | 63-71%        |                 |
| African American male          | 152      | 86       | 58%         | 49-67%        |                 | 129      | 74       | 59%         | 49-68%        |                 | 23       | 12       | 52%         | 27-77%        |                 |
| Other male                     | 39       | 20       | 60%         | 41-78%        |                 | 26       | 14       | 59%         | 39-79%        |                 | 13       | 6        | 62%         | 31-92%        |                 |
| White female                   | 1900     | 1319     | 69%         | 67-71%        |                 | 1044     | 744      | 70%         | 67-73%        |                 | 856      | 575      | 66%         | 63-70%        |                 |
| African American female        | 407      | 266      | 67%         | 62-72%        |                 | 327      | 216      | 68%         | 62-73%        |                 | 80       | 50       | 64%         | 52-76%        |                 |
| Other female                   | 65       | 37       | 56%         | 42-70%        |                 | 53       | 30       | 55%         | 41-70%        |                 | 12       | 7        | 68%         | 38-98%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006



**TABLE 4-8. PEOPLE REPORTING TO HAVE EVER HAD A SIGMOIDOSCOPY OR COLONOSCOPY,  
AMONG PARTICIPANTS AGE 50 YEARS AND OLDER**

|                                           | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|-------------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>            | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Marital Status</b>                     | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Married or partner of<br>unmarried couple | 2115     | 1511     | 70%         | 68-73%        |                 | 1211     | 877      | 71%         | 68-74%        |                 | 904      | 634      | 68%         | 64-72%        |                 |
| Divorced or separated                     | 657      | 425      | 63%         | 59-68%        |                 | 407      | 265      | 63%         | 58-69%        |                 | 250      | 160      | 62%         | 55-69%        |                 |
| Widowed                                   | 737      | 508      | 69%         | 65-74%        |                 | 420      | 309      | 71%         | 66-77%        |                 | 317      | 199      | 63%         | 57-68%        |                 |
| Never married                             | 229      | 133      | 58%         | 50-66%        |                 | 168      | 107      | 60%         | 51-69%        |                 | 61       | 26       | 45%         | 30-60%        |                 |
| <b>Education</b>                          | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Less than high school                     | 334      | 183      | 53%         | 46-60%        |                 | 168      | 95       | 53%         | 44-62%        |                 | 166      | 88       | 53%         | 43-62%        |                 |
| High school grad or GED                   | 1071     | 706      | 66%         | 63-70%        |                 | 506      | 341      | 68%         | 64-73%        |                 | 565      | 365      | 62%         | 57-67%        |                 |
| College 1-3 years                         | 886      | 620      | 68%         | 64-72%        |                 | 513      | 362      | 67%         | 63-72%        |                 | 373      | 258      | 69%         | 64-75%        |                 |
| College grad                              | 733      | 526      | 72%         | 68-75%        |                 | 502      | 363      | 72%         | 67-76%        |                 | 231      | 163      | 71%         | 65-78%        |                 |
| Advanced degree                           | 716      | 546      | 76%         | 72-80%        |                 | 521      | 401      | 76%         | 72-80%        |                 | 195      | 145      | 74%         | 67-81%        |                 |
| <b>Employment Status</b>                  | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Employed for wages                        | 1326     | 863      | 64%         | 61-67%        |                 | 830      | 550      | 65%         | 62-69%        |                 | 496      | 313      | 60%         | 55-66%        |                 |
| Self-employed                             | 283      | 176      | 61%         | 54-68%        |                 | 178      | 110      | 60%         | 52-68%        |                 | 105      | 66       | 65%         | 56-75%        |                 |
| Retired                                   | 1701     | 1288     | 77%         | 74-79%        |                 | 960      | 757      | 78%         | 75-81%        |                 | 741      | 531      | 72%         | 69-76%        |                 |
| Other                                     | 429      | 250      | 58%         | 52-64%        |                 | 240      | 142      | 58%         | 51-65%        |                 | 189      | 108      | 58%         | 49-66%        |                 |
| <b>Household Income</b>                   | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| <\$25,000                                 | 703      | 422      | 60%         | 55-65%        |                 | 364      | 224      | 61%         | 55-67%        |                 | 339      | 198      | 58%         | 52-64%        |                 |
| \$25,000-<\$35,000                        | 360      | 235      | 66%         | 59-72%        |                 | 199      | 128      | 66%         | 58-74%        |                 | 161      | 107      | 65%         | 57-73%        |                 |
| \$35,000-<\$50,000                        | 468      | 319      | 67%         | 62-73%        |                 | 262      | 180      | 67%         | 61-74%        |                 | 206      | 139      | 67%         | 60-75%        |                 |
| \$50,000-<\$75,000                        | 520      | 369      | 70%         | 65-75%        |                 | 300      | 221      | 72%         | 66-78%        |                 | 220      | 148      | 65%         | 57-72%        |                 |
| \$75,000 or greater                       | 1048     | 795      | 74%         | 71-78%        |                 | 705      | 537      | 75%         | 71-78%        |                 | 343      | 258      | 74%         | 68-79%        |                 |
| Don't know/not sure                       | 273      | 168      | 60%         | 52-67%        |                 | 149      | 95       | 60%         | 50-69%        |                 | 124      | 73       | 60%         | 50-70%        |                 |
| Refused                                   | 376      | 275      | 71%         | 65-77%        |                 | 237      | 179      | 72%         | 65-79%        |                 | 139      | 96       | 66%         | 55-78%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 4-9. REASONS GIVEN BY PARTICIPANTS AGE 50 AND OLDER FOR NEVER HAVING/NOT BEING UP-TO-DATE WITH SIGMOIDOSCOPY OR COLONOSCOPY FOR COLORECTAL CANCER SCREENING \***

| <b>Selected Response</b>                               | <b>wt %</b> |
|--------------------------------------------------------|-------------|
| Doctor didn't order it/didn't say I needed it          | 23%         |
| No reason/ never thought about it                      | 19%         |
| Didn't need it/ didn't know I needed this type of test | 17%         |
| Haven't had any problems                               | 13%         |
| Put it off/didn't get around to it                     | 11%         |
| Too painful, unpleasant, or embarrassing               | 10%         |
| Too young or not old enough                            | 4%          |
| Too expensive/no insurance/cost of test                | 3%          |
| Other reason                                           | 7%          |

\*Question asked of 1,340 participants age 50 years or older who reported they have: never had either a sigmoidoscopy or colonoscopy; have not had a sigmoidoscopy in the last 5 years; or have not had a colonoscopy in the last 10 years. More than one response could be given per respondent.

**TABLE 4-10. RESPONSES TO THE QUESTION, "WHICH OF THE FOLLOWING DID THE DOCTOR OR HEALTH CARE PROFESSIONAL DO TO HELP YOU GET A SIGMOIDOSCOPY OR COLONOSCOPY?" \***

| <b>Selected Response</b>                                             | <b>wt %</b> |
|----------------------------------------------------------------------|-------------|
| Refer you to a place or doctor where the test could be done          | 63%         |
| Call the office and set up appointment for you                       | 19%         |
| Do nothing other than make the recommendation                        | 14%         |
| Do the sigmoidoscopy or colonoscopy him/herself                      | 13%         |
| Send you a letter/postcard or call to tell you where to get the test | 7%          |
| Do something else                                                    | 2%          |

\*Question asked of 2743 participants age 50 years or older who reported that a doctor or other health professional had ever recommended they have a sigmoidoscopy or colonoscopy. More than one response could be given per respondent.

## Chapter 5. Prostate Cancer Screening

Cancer of the prostate is the most common cancer (excluding non-melanoma skin cancer) among men in Maryland, accounting for 4,294 cases in 2002.<sup>1</sup> It is the second leading cause of statewide cancer deaths among men after lung cancer.<sup>1</sup> Maryland had the 14<sup>th</sup> highest mortality rate for prostate cancer among the 50 states and the District of Columbia for the period 2000 to 2003.<sup>2</sup>

Serum prostate-specific antigen (PSA) and the digital rectal exam (DRE) are the two tests most commonly used to screen for prostate cancer. Whether men should be screened for prostate cancer and at what age screening should begin are controversial issues. There is no recommendation for prostate cancer screening in Healthy People 2010. The American Cancer Society (ACS) recommends offering annual screening beginning at age 50 years for men of average risk and earlier, at age 45 years for men at higher risk (e.g., African Americans and men who have an FDR with prostate cancer).<sup>3</sup> The ACS recommends that men with more than one first-degree relative with prostate cancer could begin testing at age 40.<sup>3,4</sup> On the other hand, the United States Preventive Services Task Force (USPSTF) stated that there is insufficient evidence for or against routine screening for prostate cancer using PSA testing or DRE.<sup>5</sup> The USPSTF, as well as other groups, recommend that a man and his health care provider discuss the pros and cons of screening and make a shared decision before a man chooses to undergo testing.

### Familiarity with the PSA Screening Test (among all men age 40 years and older; Table 5-1)

- Seventy-six percent (76%) of men age 40 years and older reported they had heard of the PSA test for prostate cancer screening.
  - A higher proportion of men age 65 years and older were familiar with the PSA test (93%), compared with younger men.
  - Compared with White men (78%), a lower proportion of African American men (70%) and men of other races (64%) reported having heard of the PSA test.
  - The proportion of men familiar with the PSA test generally increased with increasing level of education.

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<sup>1</sup> Maryland Department of Health and Mental Hygiene. Cancer Report 2006. Baltimore, MD; 2006. Available at [http://www.fha.state.md.us/cancer/surveillance/pdf/CRF\\_Can\\_Rpt\\_2006\\_Final\\_PNO\\_v9u.pdf](http://www.fha.state.md.us/cancer/surveillance/pdf/CRF_Can_Rpt_2006_Final_PNO_v9u.pdf). Last accessed July 13, 2007.

<sup>2</sup> Ries LAG et al. (eds). *SEER Cancer Statistics Review, 1975-2003*, National Cancer Institute. Bethesda, MD; Available at [http://seer.cancer.gov/csr/1975\\_2003](http://seer.cancer.gov/csr/1975_2003) (based on November 2005 SEER data submission). Last accessed July 13, 2006.

<sup>3</sup> American Cancer Society, Cancer Detection Guidelines (available at [http://www.cancer.org/docroot/PED/content/PED\\_2\\_3X\\_ACS\\_Cancer\\_Detection\\_Guidelines\\_36.asp?sitearea=PED](http://www.cancer.org/docroot/PED/content/PED_2_3X_ACS_Cancer_Detection_Guidelines_36.asp?sitearea=PED) Last accessed July 13, 2007) and DHMH Prostate Cancer Medical Advisory Committee, Minimal Elements 2002.

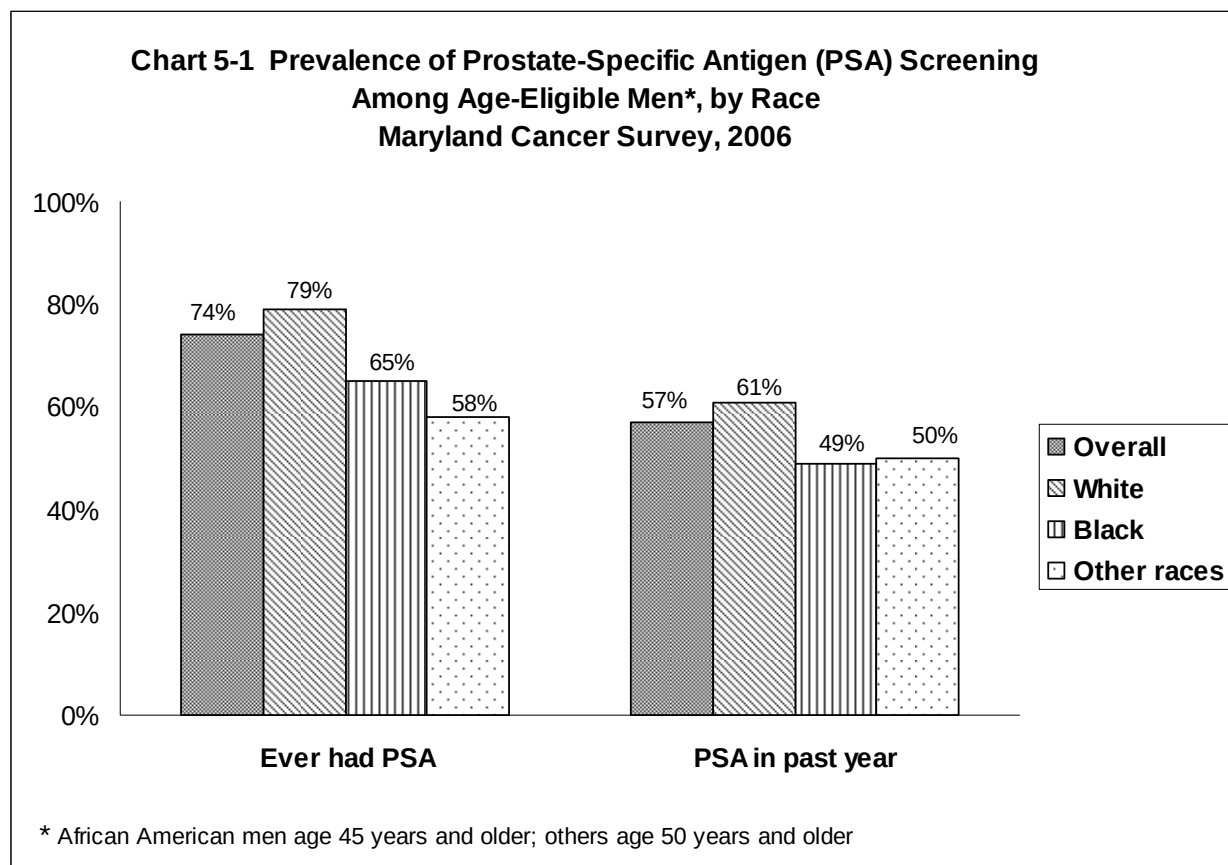
<sup>4</sup> American Cancer Society. Detailed guide: Prostate Cancer “Can Prostate Cancer Be Found Early?” Available at [http://www.cancer.org/docroot/CRI/content/CRI\\_2\\_4\\_3X\\_Can\\_prostate\\_cancer\\_be\\_found\\_early\\_36.asp](http://www.cancer.org/docroot/CRI/content/CRI_2_4_3X_Can_prostate_cancer_be_found_early_36.asp). Last accessed July 13, 2007.

<sup>5</sup> U.S. Preventive Services Task Force. 2002. Screening for Prostate Cancer. Available at <http://www.ahrq.gov/clinic/uspstf/uspSprca.htm>. Last accessed July 13, 2007.

Prevalence of Ever Having a PSA Test (among African American men age 45 years and older and all other men age 50 years and older; Table 5-2 and Chart 5-1)

- Seventy-four percent (74%) of age-eligible men reported ever having the PSA test.
- Among men of all races age 50 and older, the prevalence of ever having a PSA test was lower among those in the 50 to 64 year age group (70%) than for men age 65 years and older (86%).
- White men had statistically significantly higher prevalence of ever having a PSA test (79%), compared to African American men (65%) and men of other races (58%). (In these age groups, the number of men of other races was small, which can result in unstable estimates of PSA testing prevalence.)
- The prevalence of PSA testing increased with increasing level of education.
- The percentage of men who ever had a PSA test did not differ significantly by urban vs. rural area of residence.

The prevalence of PSA testing was much lower among men (of all races) under the age of 50 years. Only 19% of all men age 40 to 44 years and 38% of men age 45 to 49 years had ever been screened. African American men age 45 to 49 years were significantly more likely to have ever had a PSA test (58%) compared to White men (33%) or men of other races (24%) in the same age group. (Data not in tables.)



### Prevalence of PSA Testing in the Past Year

- Fifty-seven percent (57%) of men in age- and race-eligible groups reported having a PSA test within the year prior to the survey (Table 5-3 and Chart 5-1).
  - Among men of all races, the prevalence of testing within the preceding year increased with age, from 52% of men age 50 to 64 years to 69% of men age 65 years and older.
  - The prevalence of testing in the past year was significantly higher among Whites (61%) compared to African Americans (49%).
  - PSA testing within the last year increased with increasing educational level.

### Reasons for Never Having a PSA Test or Not Having a PSA Test in the Past Year (among African American men age 45 years and older and all other men age 50 years and older)

- Age- and race-eligible men who reported never having a PSA test or not having a PSA test in the past year were asked to name the most important reason why they have not been tested (Table 5-4).
  - Almost one-third (31%) reported the doctor did not order the test or say it was needed.
  - Nineteen percent (19%) gave no reason or said they never thought about it.
  - Eighteen percent (18%) said they didn't need the test or didn't know they needed the test.
  - Ten percent (10%) reported they haven't had any problems.
  - Only 2% cited cost of the test or lack of insurance as reasons for not having the test.

### Health Care Provider (HCP) Discussions and PSA Testing

Several professional groups recommend that HCPs talk with their male patients about prostate cancer screening, using a shared decision-making approach to testing. To assess the extent of this practice, male respondents to the MCS were asked whether an HCP had ever discussed prostate cancer screening with them.

- Sixty percent (60%) of men age 40 years and older reported that a doctor or other HCP had ever discussed prostate cancer screening with them (Table 5-5).
  - This proportion was significantly lower among men age 40 to 49 years (42%) compared to men in older age categories (68% of men age 50 to 64 years and 77% of men age 65 years and older).
  - The proportion of men who reported discussing prostate cancer screening with an HCP increased with education level and household income.
  - Men least likely to report discussions of PSA testing were those who were never married (36%) and men with less than a high school education (38%).
  - Of age- and race-eligible men who reported discussing prostate cancer screening with their HCP, 89% reported having a PSA test, compared to only 39% of men who had not had such discussions. (Data not in tables.)

### Family History of Prostate Cancer and Prevalence of PSA Testing (data not in tables)

- Among MCS respondents, 12% of all men age 40 years and older reported a family history of prostate cancer in an FDR.
- Among men with a family history of prostate cancer,
  - Seventy-nine percent (79%) of those age 40 years and older have ever had a PSA test.

- Ninety-two percent (92%) of those age 50 years and older reported ever having a PSA test. By comparison, only 73% of men age 50 years and older without a family history of prostate cancer reported ever having a PSA test.

#### Prevalence of Prostate Cancer Screening by DRE (Table 5-6)

- Among Maryland men in the age groups recommended by the ACS for prostate screening, 89% reported ever having a DRE.
- As with PSA testing, a higher proportion of men age 65 years and older reported ever having a DRE (94%) compared to men in younger age groups (87% of men ages 50 to 64 and 79% of African American men age 45 to 49 years).
- The prevalence of ever having DRE screening was significantly lower among African American men (82%) and men of other races (77%) compared with White men (92%).
- The prevalence of screening by DRE increased with increasing level of education and with increasing annual household income.

#### Prevalence of DRE in the Past Year (Table 5-7)

Among age-eligible men (African American men age 45 years and older and all other men age 50 years and older),

- Fifty-seven percent (57%) reported having a DRE in the past year.
- Higher prevalence of screening by DRE was found among men age 65 years and older (compared to younger men), men who are married or partnered (compared to men in other marital status categories), men with higher levels of education, and men with higher annual household income.
- Only 45% reported they had received both a PSA and DRE in the past year. (Data not in tables.)

**TABLE 5-1. RESPONDENTS REPORTING HAVING HEARD OF PROSTATE-SPECIFIC ANTIGEN (PSA) TEST, AMONG MEN AGE 40 YEARS AND OLDER**

|                                        | Ever heard of the Prostate-Specific Antigen test ~ |          |             |               |                 |
|----------------------------------------|----------------------------------------------------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b>                                           | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Male Population</b>                 | 1882                                               | 1481     | 76%         | 73-78%        |                 |
| <b>Area of Residence</b>               |                                                    |          |             |               | ^               |
| Urban                                  | 1087                                               | 869      | 76%         | 73-80%        |                 |
| Rural                                  | 795                                                | 612      | 73%         | 69-77%        |                 |
| <b>Age</b>                             |                                                    |          |             |               | **              |
| 40-49 years                            | 522                                                | 307      | 59%         | 54-64%        |                 |
| 50-64 years                            | 781                                                | 645      | 82%         | 79-85%        |                 |
| 65 years and older                     | 579                                                | 529      | 93%         | 91-95%        |                 |
| <b>Race</b>                            |                                                    |          |             |               | **              |
| White                                  | 1572                                               | 1267     | 78%         | 76-81%        |                 |
| African American or Black              | 238                                                | 172      | 70%         | 63-77%        |                 |
| Other                                  | 72                                                 | 42       | 64%         | 50-77%        |                 |
| <b>Marital Status</b>                  |                                                    |          |             |               | **              |
| Married or partner of unmarried couple | 1324                                               | 1074     | 79%         | 76-82%        |                 |
| Divorced or separated                  | 267                                                | 190      | 60%         | 52-68%        |                 |
| Widowed                                | 133                                                | 109      | 83%         | 75-91%        |                 |
| Never married                          | 155                                                | 106      | 63%         | 53-73%        |                 |
| <b>Education</b>                       |                                                    |          |             |               | **              |
| Less than high school                  | 145                                                | 94       | 68%         | 58-79%        |                 |
| High school grad or GED                | 463                                                | 318      | 65%         | 59-70%        |                 |
| College 1-3 years                      | 407                                                | 326      | 77%         | 71-82%        |                 |
| College grad                           | 440                                                | 369      | 79%         | 74-84%        |                 |
| Advanced degree                        | 424                                                | 371      | 85%         | 80-90%        |                 |
| <b>Employment Status</b>               |                                                    |          |             |               | **              |
| Employed for wages                     | 898                                                | 661      | 72%         | 69-76%        |                 |
| Self-employed                          | 217                                                | 165      | 70%         | 62-78%        |                 |
| Retired                                | 630                                                | 570      | 91%         | 88-94%        |                 |
| Other                                  | 133                                                | 81       | 57%         | 45-69%        |                 |
| <b>Household Income</b>                |                                                    |          |             |               | **              |
| <\$25,000                              | 238                                                | 160      | 62%         | 53-71%        |                 |
| \$25,000-<\$35,000                     | 155                                                | 119      | 70%         | 59-81%        |                 |
| \$35,000-<\$50,000                     | 238                                                | 185      | 76%         | 69-82%        |                 |
| \$50,000-<\$75,000                     | 300                                                | 230      | 74%         | 68-80%        |                 |
| \$75,000 or greater                    | 754                                                | 629      | 80%         | 76-84%        |                 |
| Don't know/not sure                    | 72                                                 | 50       | 65%         | 52-79%        |                 |
| Refused                                | 125                                                | 108      | 84%         | 75-93%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1



**TABLE 5-2. MEN REPORTING TO HAVE EVER HAD A PROSTATE- SPECIFIC ANTIGEN (PSA) TEST, AMONG MEN OF ALL RACES AGE 50 YEARS AND OLDER AND AFRICAN AMERICAN MEN AGE 45-49 YEARS**

|                                           | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|-------------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>            | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Male Population</b>                    | 1328     | 1025     | 74%         | 71-78%        |                 | 771      | 601      | 74%         | 71-78%        |                 | 557      | 424      | 74%         | 70-79%        |                 |
| <b>Age</b>                                | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| 45-49 (AA only)                           | 42       | 24       | 58%         | 41-74%        |                 | 35       | 22       | 60%         | 42-78%        |                 | 7        | 2        | 41%         | 0-83%         |                 |
| 50-64 years                               | 733      | 523      | 70%         | 66-74%        |                 | 422      | 306      | 70%         | 65-75%        |                 | 311      | 217      | 69%         | 63-75%        |                 |
| 65 years and older                        | 553      | 478      | 86%         | 82-90%        |                 | 314      | 273      | 85%         | 80-91%        |                 | 239      | 205      | 87%         | 83-92%        |                 |
| <b>Race</b>                               | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| White                                     | 1110     | 881      | 79%         | 76-82%        |                 | 595      | 484      | 80%         | 77-84%        |                 | 515      | 397      | 76%         | 72-80%        |                 |
| African American or Black                 | 182      | 123      | 65%         | 57-73%        |                 | 152      | 104      | 65%         | 56-73%        |                 | 30       | 19       | 66%         | 47-85%        |                 |
| Other                                     | 36       | 21       | 58%         | 39-78%        |                 | 24       | 13       | 59%         | 38-80%        |                 | 12       | 8        | 52%         | 17-87%        |                 |
| <b>Marital Status</b>                     | **       |          |             |               |                 | ^        |          |             |               |                 | **       |          |             |               |                 |
| Married or partner of<br>unmarried couple | 934      | 747      | 76%         | 73-80%        |                 | 529      | 425      | 76%         | 72-80%        |                 | 405      | 322      | 77%         | 73-82%        |                 |
| Divorced or separated                     | 192      | 137      | 68%         | 59-76%        |                 | 109      | 77       | 67%         | 57-78%        |                 | 83       | 60       | 69%         | 56-81%        |                 |
| Widowed                                   | 120      | 91       | 74%         | 63-85%        |                 | 71       | 57       | 75%         | 61-88%        |                 | 49       | 34       | 71%         | 57-85%        |                 |
| Never married                             | 79       | 48       | 63%         | 50-76%        |                 | 59       | 40       | 68%         | 54-82%        |                 | 20       | 8        | 24%         | 6-41%         |                 |
| <b>Education</b>                          | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Less than high school                     | 107      | 59       | 56%         | 43-69%        |                 | 58       | 33       | 53%         | 38-69%        |                 | 49       | 26       | 64%         | 49-79%        |                 |
| High school grad or GED                   | 305      | 210      | 69%         | 63-76%        |                 | 135      | 97       | 73%         | 64-81%        |                 | 170      | 113      | 62%         | 52-71%        |                 |
| College 1-3 years                         | 293      | 229      | 75%         | 68-81%        |                 | 156      | 118      | 73%         | 65-81%        |                 | 137      | 111      | 80%         | 72-88%        |                 |
| College grad                              | 309      | 251      | 75%         | 68-82%        |                 | 208      | 166      | 73%         | 65-81%        |                 | 101      | 85       | 85%         | 77-93%        |                 |
| Advanced degree                           | 313      | 275      | 85%         | 80-90%        |                 | 213      | 186      | 85%         | 79-91%        |                 | 100      | 89       | 85%         | 76-95%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 5-2. MEN REPORTING TO HAVE EVER HAD A PROSTATE- SPECIFIC ANTIGEN (PSA) TEST, AMONG MEN OF ALL RACES AGE 50 YEARS AND OLDER AND AFRICAN AMERICAN MEN AGE 45-49 YEARS**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Employment Status</b>       | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Employed for wages             | 506      | 365      | 70%         | 65-75%        |                 | 318      | 233      | 71%         | 65-77%        |                 | 188      | 132      | 67%         | 59-75%        |                 |
| Self-employed                  | 145      | 111      | 73%         | 64-83%        |                 | 83       | 63       | 72%         | 60-83%        |                 | 62       | 48       | 79%         | 68-90%        |                 |
| Retired                        | 597      | 502      | 83%         | 78-87%        |                 | 328      | 278      | 82%         | 77-88%        |                 | 269      | 224      | 84%         | 79-89%        |                 |
| Other                          | 78       | 45       | 57%         | 43-70%        |                 | 40       | 25       | 57%         | 40-75%        |                 | 38       | 20       | 54%         | 35-74%        |                 |
| <b>Household Income</b>        | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| <\$25,000                      | 172      | 103      | 58%         | 48-69%        |                 | 80       | 46       | 56%         | 43-70%        |                 | 92       | 57       | 64%         | 53-75%        |                 |
| \$25,000-<\$35,000             | 122      | 90       | 71%         | 60-82%        |                 | 65       | 49       | 73%         | 59-87%        |                 | 57       | 41       | 65%         | 49-80%        |                 |
| \$35,000-<\$50,000             | 179      | 130      | 66%         | 57-75%        |                 | 105      | 72       | 64%         | 54-75%        |                 | 74       | 58       | 73%         | 61-85%        |                 |
| \$50,000-<\$75,000             | 209      | 160      | 72%         | 63-80%        |                 | 118      | 92       | 71%         | 61-82%        |                 | 91       | 68       | 73%         | 62-85%        |                 |
| \$75,000 or greater            | 497      | 420      | 82%         | 78-87%        |                 | 308      | 263      | 83%         | 78-88%        |                 | 189      | 157      | 81%         | 74-87%        |                 |
| Don't know/not sure            | 51       | 39       | 70%         | 53-86%        |                 | 28       | 21       | 68%         | 48-89%        |                 | 23       | 18       | 74%         | 52-96%        |                 |
| Refused                        | 98       | 83       | 85%         | 75-94%        |                 | 67       | 58       | 84%         | 73-96%        |                 | 31       | 25       | 86%         | 74-99%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 5-3. MEN REPORTING TO HAVE HAD A PROSTATE-SPECIFIC ANTIGEN (PSA) TEST IN THE PAST YEAR, AMONG MEN OF ALL RACES AGE 50 YEARS AND OLDER AND AFRICAN AMERICAN MEN AGE 45-49 YEARS**

|                                           | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|-------------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>            | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Male Population</b>                    | 1328     | 784      | 57%         | 54-60%        |                 | 771      | 467      | 58%         | 53-62%        |                 | 557      | 317      | 55%         | 50-60%        |                 |
| <b>Age</b>                                | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| 45-49 (AA only)                           | 42       | 18       | 46%         | 29-62%        |                 | 35       | 16       | 46%         | 28-64%        |                 | 7        | 2        | 41%         | 0-83%         |                 |
| 50-64 years                               | 733      | 382      | 52%         | 47-56%        |                 | 422      | 228      | 52%         | 47-58%        |                 | 311      | 154      | 49%         | 42-56%        |                 |
| 65 years and above                        | 553      | 384      | 69%         | 64-74%        |                 | 314      | 223      | 69%         | 63-76%        |                 | 239      | 161      | 66%         | 59-73%        |                 |
| <b>Race</b>                               | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| White                                     | 1110     | 676      | 61%         | 57-64%        |                 | 595      | 378      | 62%         | 58-66%        |                 | 515      | 298      | 57%         | 52-62%        |                 |
| African American or Black                 | 182      | 90       | 49%         | 40-57%        |                 | 152      | 78       | 49%         | 40-58%        |                 | 30       | 12       | 42%         | 21-64%        |                 |
| Other                                     | 36       | 18       | 50%         | 30-71%        |                 | 24       | 11       | 51%         | 29-73%        |                 | 12       | 7        | 46%         | 13-80%        |                 |
| <b>Marital Status</b>                     | **       |          |             |               |                 | ^        |          |             |               |                 | **       |          |             |               |                 |
| Married or partner of<br>unmarried couple | 934      | 577      | 59%         | 56-63%        |                 | 529      | 336      | 60%         | 55-65%        |                 | 405      | 241      | 57%         | 52-63%        |                 |
| Divorced or separated                     | 192      | 100      | 48%         | 40-57%        |                 | 109      | 57       | 49%         | 38-59%        |                 | 83       | 43       | 48%         | 34-61%        |                 |
| Widowed                                   | 120      | 70       | 52%         | 41-63%        |                 | 71       | 42       | 51%         | 37-64%        |                 | 49       | 28       | 56%         | 41-72%        |                 |
| Never married                             | 79       | 36       | 46%         | 31-60%        |                 | 59       | 31       | 50%         | 34-66%        |                 | 20       | 5        | 14%         | 1-27%         |                 |
| <b>Education</b>                          | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Less than high school                     | 107      | 42       | 41%         | 29-53%        |                 | 58       | 25       | 42%         | 27-57%        |                 | 49       | 17       | 37%         | 20-54%        |                 |
| High school grad or GED                   | 305      | 162      | 54%         | 47-61%        |                 | 135      | 77       | 57%         | 48-67%        |                 | 170      | 85       | 46%         | 37-55%        |                 |
| College 1-3 years                         | 293      | 179      | 56%         | 49-63%        |                 | 156      | 91       | 54%         | 45-63%        |                 | 137      | 88       | 63%         | 53-72%        |                 |
| College grad                              | 309      | 191      | 56%         | 49-63%        |                 | 208      | 127      | 54%         | 46-62%        |                 | 101      | 64       | 66%         | 56-76%        |                 |
| Advanced degree                           | 313      | 210      | 67%         | 61-74%        |                 | 213      | 147      | 69%         | 63-76%        |                 | 100      | 63       | 58%         | 47-69%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 5-3. MEN REPORTING TO HAVE HAD A PROSTATE-SPECIFIC ANTIGEN (PSA) TEST IN THE PAST YEAR, AMONG MEN OF ALL RACES AGE 50 YEARS AND OLDER AND AFRICAN AMERICAN MEN AGE 45-49 YEARS**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Employment Status</b>       | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Employed for wages             | 506      | 262      | 52%         | 47-57%        |                 | 318      | 172      | 53%         | 47-59%        |                 | 188      | 90       | 48%         | 39-57%        |                 |
| Self-employed                  | 145      | 87       | 53%         | 43-63%        |                 | 83       | 48       | 52%         | 39-64%        |                 | 62       | 39       | 59%         | 46-72%        |                 |
| Retired                        | 597      | 399      | 65%         | 60-70%        |                 | 328      | 224      | 65%         | 59-72%        |                 | 269      | 175      | 65%         | 58-71%        |                 |
| Other                          | 78       | 35       | 48%         | 34-61%        |                 | 40       | 22       | 53%         | 36-71%        |                 | 38       | 13       | 31%         | 14-49%        |                 |
| <b>Household Income</b>        | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| <\$25,000                      | 172      | 79       | 46%         | 36-56%        |                 | 80       | 38       | 46%         | 33-60%        |                 | 92       | 41       | 46%         | 34-57%        |                 |
| \$25,000-<\$35,000             | 122      | 73       | 57%         | 45-68%        |                 | 65       | 39       | 58%         | 44-73%        |                 | 57       | 34       | 52%         | 37-67%        |                 |
| \$35,000-<\$50,000             | 179      | 98       | 49%         | 40-58%        |                 | 105      | 54       | 47%         | 36-58%        |                 | 74       | 44       | 56%         | 44-68%        |                 |
| \$50,000-<\$75,000             | 209      | 121      | 54%         | 46-63%        |                 | 118      | 70       | 55%         | 44-65%        |                 | 91       | 51       | 54%         | 41-67%        |                 |
| \$75,000 or greater            | 497      | 321      | 64%         | 59-69%        |                 | 308      | 206      | 65%         | 59-71%        |                 | 189      | 115      | 58%         | 51-66%        |                 |
| Don't know/not sure            | 51       | 27       | 46%         | 29-63%        |                 | 28       | 14       | 42%         | 21-63%        |                 | 23       | 13       | 57%         | 34-81%        |                 |
| Refused                        | 98       | 65       | 64%         | 52-76%        |                 | 67       | 46       | 64%         | 51-78%        |                 | 31       | 19       | 61%         | 36-87%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 5-4. RESPONSES TO THE QUESTION "WHAT WAS THE MOST IMPORTANT REASON YOU HAVE NEVER HAD A PROSTATE SPECIFIC ANTIGEN TEST OR HAVE NOT HAD A PSA TEST IN THE LAST 12 MONTHS?" \***

| <b>Selected Response</b>                      | <b>wt %</b> |
|-----------------------------------------------|-------------|
| Doctor didn't order it/didn't say I needed it | 31%         |
| No reason/never thought about it              | 19%         |
| Didn't need it, didn't know I needed the test | 18%         |
| Haven't had any problems                      | 10%         |
| Never heard of the test                       | 7%          |
| Put it off / Didn't get around to it          | 5%          |
| Too expensive/ no insurance /cost of test     | 2%          |
| Felt to be too young/ too old for the test    | 2%          |
| Unsure if had test                            | 2%          |
| Other reasons                                 | 11%         |

\*Question asked of 647 men who were (a) age 50 years or older or age 45-49 years and African American and (b) who reported they had either never had a PSA test or had not had a PSA test in the last 12 months. More than one response could be given per respondent.

**TABLE 5-5. RESPONDENTS REPORTING HAVING DISCUSSED PROSTATE CANCER SCREENING WITH A HEALTH CARE PROVIDER, AMONG MEN AGE 40 YEARS AND OLDER**

|                                        | Has had a health care provider discussed prostate cancer screening ~ |          |             |               |                 |
|----------------------------------------|----------------------------------------------------------------------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b>                                                             | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Male Population</b>                 | 1884                                                                 | 1185     | 60%         | 57-63%        |                 |
| <b>Area of Residence</b>               |                                                                      |          |             |               | *               |
| Urban                                  | 1097                                                                 | 700      | 61%         | 58-64%        |                 |
| Rural                                  | 787                                                                  | 485      | 57%         | 52-61%        |                 |
| <b>Age</b>                             |                                                                      |          |             |               | **              |
| 40-49 years                            | 523                                                                  | 218      | 42%         | 37-48%        |                 |
| 50-64 years                            | 784                                                                  | 531      | 68%         | 64-72%        |                 |
| 65 years and older                     | 577                                                                  | 436      | 77%         | 73-81%        |                 |
| <b>Race</b>                            |                                                                      |          |             |               | ^               |
| White                                  | 1576                                                                 | 1015     | 62%         | 59-65%        |                 |
| African American or Black              | 237                                                                  | 135      | 56%         | 48-63%        |                 |
| Other                                  | 71                                                                   | 35       | 53%         | 38-67%        |                 |
| <b>Marital Status</b>                  |                                                                      |          |             |               | **              |
| Married or partner of unmarried couple | 1329                                                                 | 888      | 64%         | 61-67%        |                 |
| Divorced or separated                  | 267                                                                  | 151      | 52%         | 44-60%        |                 |
| Widowed                                | 132                                                                  | 83       | 61%         | 50-72%        |                 |
| Never married                          | 153                                                                  | 62       | 36%         | 27-46%        |                 |
| <b>Education</b>                       |                                                                      |          |             |               | **              |
| Less than high school                  | 145                                                                  | 56       | 38%         | 27-49%        |                 |
| High school grad or GED                | 468                                                                  | 246      | 51%         | 45-56%        |                 |
| College 1-3 years                      | 402                                                                  | 263      | 64%         | 57-70%        |                 |
| College grad                           | 444                                                                  | 309      | 65%         | 59-71%        |                 |
| Advanced degree                        | 423                                                                  | 310      | 69%         | 64-75%        |                 |
| <b>Employment Status</b>               |                                                                      |          |             |               | **              |
| Employed for wages                     | 893                                                                  | 525      | 57%         | 53-61%        |                 |
| Self-employed                          | 217                                                                  | 132      | 57%         | 48-65%        |                 |
| Retired                                | 635                                                                  | 466      | 73%         | 69-78%        |                 |
| Other                                  | 136                                                                  | 60       | 42%         | 30-55%        |                 |
| <b>Household Income</b>                |                                                                      |          |             |               | **              |
| <\$25,000                              | 240                                                                  | 113      | 45%         | 37-54%        |                 |
| \$25,000-<\$35,000                     | 154                                                                  | 96       | 55%         | 44-66%        |                 |
| \$35,000-<\$50,000                     | 237                                                                  | 141      | 58%         | 50-66%        |                 |
| \$50,000-<\$75,000                     | 296                                                                  | 186      | 60%         | 53-67%        |                 |
| \$75,000 or greater                    | 756                                                                  | 525      | 65%         | 61-69%        |                 |
| Don't know/not sure                    | 75                                                                   | 41       | 50%         | 35-64%        |                 |
| Refused                                | 126                                                                  | 83       | 66%         | 55-78%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 5-6. MEN REPORTING TO HAVE EVER HAD A DIGITAL RECTAL EXAM (DRE), AMONG MEN OF ALL RACES AGE 50 YEARS AND OLDER AND AFRICAN AMERICAN MEN AGE 45-49 YEARS**

|                                           | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|-------------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>            | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Male Population</b>                    | 1420     | 1273     | 89%         | 87-91%        |                 | 828      | 740      | 89%         | 86-91%        |                 | 592      | 533      | 89%         | 85-92%        |                 |
| <b>Age</b>                                | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| 45-49 (AA only)                           | 46       | 35       | 79%         | 67-91%        |                 | 39       | 31       | 84%         | 72-95%        |                 | 7        | 4        | 45%         | 6-84%         |                 |
| 50-64 years                               | 791      | 694      | 87%         | 84-90%        |                 | 460      | 400      | 87%         | 83-90%        |                 | 331      | 294      | 88%         | 84-93%        |                 |
| 65 years and above                        | 583      | 544      | 94%         | 92-96%        |                 | 329      | 309      | 94%         | 91-97%        |                 | 254      | 235      | 94%         | 91-97%        |                 |
| <b>Race</b>                               | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| White                                     | 1184     | 1083     | 92%         | 90-94%        |                 | 635      | 582      | 92%         | 90-94%        |                 | 549      | 501      | 92%         | 89-94%        |                 |
| African American or Black                 | 196      | 161      | 82%         | 76-88%        |                 | 167      | 138      | 84%         | 78-90%        |                 | 29       | 23       | 67%         | 46-89%        |                 |
| Other                                     | 40       | 29       | 77%         | 62-92%        |                 | 26       | 20       | 79%         | 63-95%        |                 | 14       | 9        | 56%         | 23-89%        |                 |
| <b>Marital Status</b>                     | **       |          |             |               |                 | *        |          |             |               |                 | **       |          |             |               |                 |
| Married or partner of<br>unmarried couple | 989      | 911      | 90%         | 88-93%        |                 | 564      | 512      | 90%         | 88-93%        |                 | 425      | 399      | 91%         | 87-95%        |                 |
| Divorced or separated                     | 211      | 173      | 82%         | 75-88%        |                 | 119      | 102      | 83%         | 75-91%        |                 | 92       | 71       | 77%         | 66-87%        |                 |
| Widowed                                   | 127      | 111      | 87%         | 79-96%        |                 | 75       | 69       | 89%         | 78-100%       |                 | 52       | 42       | 82%         | 72-93%        |                 |
| Never married                             | 90       | 75       | 81%         | 71-91%        |                 | 67       | 54       | 80%         | 69-91%        |                 | 23       | 21       | 87%         | 67-100%       |                 |
| <b>Education</b>                          | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Less than high school                     | 119      | 87       | 76%         | 66-85%        |                 | 63       | 45       | 74%         | 62-87%        |                 | 56       | 42       | 81%         | 70-91%        |                 |
| High school grad or GED                   | 333      | 296      | 88%         | 84-93%        |                 | 147      | 129      | 88%         | 82-94%        |                 | 186      | 167      | 89%         | 83-95%        |                 |
| College 1-3 years                         | 311      | 278      | 87%         | 82-92%        |                 | 167      | 148      | 89%         | 83-95%        |                 | 144      | 130      | 83%         | 73-93%        |                 |
| College grad                              | 323      | 298      | 92%         | 88-95%        |                 | 221      | 205      | 92%         | 87-96%        |                 | 102      | 93       | 92%         | 87-97%        |                 |
| Advanced degree                           | 333      | 313      | 92%         | 88-96%        |                 | 229      | 212      | 91%         | 87-96%        |                 | 104      | 101      | 98%         | 96-100%       |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 5-6. MEN REPORTING TO HAVE EVER HAD A DIGITAL RECTAL EXAM (DRE), AMONG MEN OF ALL RACES AGE 50 YEARS AND OLDER AND AFRICAN AMERICAN MEN AGE 45-49 YEARS**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Employment Status</b>       | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Employed for wages             | 544      | 488      | 89%         | 86-92%        |                 | 345      | 308      | 89%         | 86-93%        |                 | 199      | 180      | 87%         | 80-94%        |                 |
| Self-employed                  | 150      | 128      | 83%         | 76-91%        |                 | 88       | 73       | 81%         | 72-91%        |                 | 62       | 55       | 91%         | 84-98%        |                 |
| Retired                        | 633      | 584      | 93%         | 90-95%        |                 | 347      | 322      | 93%         | 90-96%        |                 | 286      | 262      | 93%         | 90-96%        |                 |
| Other                          | 91       | 71       | 75%         | 63-86%        |                 | 46       | 35       | 76%         | 62-90%        |                 | 45       | 36       | 72%         | 53-91%        |                 |
| <b>Household Income</b>        | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| <\$25,000                      | 196      | 156      | 79%         | 71-86%        |                 | 93       | 73       | 79%         | 69-88%        |                 | 103      | 83       | 79%         | 70-89%        |                 |
| \$25,000-<\$35,000             | 132      | 114      | 84%         | 76-92%        |                 | 68       | 57       | 84%         | 74-93%        |                 | 64       | 57       | 85%         | 71-98%        |                 |
| \$35,000-<\$50,000             | 185      | 166      | 87%         | 81-93%        |                 | 108      | 94       | 85%         | 78-93%        |                 | 77       | 72       | 93%         | 86-99%        |                 |
| \$50,000-<\$75,000             | 221      | 195      | 87%         | 81-93%        |                 | 127      | 116      | 90%         | 83-96%        |                 | 94       | 79       | 76%         | 63-90%        |                 |
| \$75,000 or greater            | 526      | 499      | 95%         | 93-97%        |                 | 332      | 312      | 94%         | 92-97%        |                 | 194      | 187      | 97%         | 95-99%        |                 |
| Don't know/not sure            | 59       | 49       | 80%         | 66-94%        |                 | 30       | 23       | 74%         | 56-93%        |                 | 29       | 26       | 95%         | 88-100%       |                 |
| Refused                        | 101      | 94       | 91%         | 82-100%       |                 | 70       | 65       | 90%         | 80-100%       |                 | 31       | 29       | 96%         | 90-100%       |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1



**TABLE 5-7. MEN REPORTING TO HAVE HAD A DIGITAL RECTAL EXAM (DRE) IN THE PAST YEAR, AMONG MEN OF ALL RACES AGE 50 YEARS AND OLDER AND AFRICAN AMERICAN MEN AGE 45-49 YEARS**

|                                        | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|----------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Male Population</b>                 | 1420     | 804      | 57%         | 54-60%        |                 | 828      | 482      | 58%         | 54-62%        |                 | 592      | 322      | 53%         | 48-58%        |                 |
| <b>Age</b>                             | **       |          |             |               |                 | **       |          |             |               |                 | *        |          |             |               |                 |
| 45-49 (AA only)                        | 46       | 22       | 54%         | 38-69%        |                 | 39       | 20       | 58%         | 41-74%        |                 | 7        | 2        | 22%         | 0-52%         |                 |
| 50-64 years                            | 791      | 406      | 51%         | 47-56%        |                 | 460      | 236      | 51%         | 46-56%        |                 | 331      | 170      | 52%         | 46-58%        |                 |
| 65 years and above                     | 583      | 376      | 68%         | 64-73%        |                 | 329      | 226      | 71%         | 66-77%        |                 | 254      | 150      | 58%         | 51-65%        |                 |
| <b>Race</b>                            | ^        |          |             |               |                 | ^        |          |             |               |                 | **       |          |             |               |                 |
| White                                  | 1184     | 686      | 59%         | 56-62%        |                 | 635      | 380      | 60%         | 56-64%        |                 | 549      | 306      | 56%         | 52-61%        |                 |
| African American or Black              | 196      | 101      | 54%         | 46-62%        |                 | 167      | 90       | 56%         | 48-65%        |                 | 29       | 11       | 32%         | 13-50%        |                 |
| Other                                  | 40       | 17       | 49%         | 29-68%        |                 | 26       | 12       | 51%         | 30-72%        |                 | 14       | 5        | 19%         | 0-38%         |                 |
| <b>Marital Status</b>                  | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Married or partner of unmarried couple | 989      | 610      | 61%         | 58-65%        |                 | 564      | 357      | 63%         | 58-67%        |                 | 425      | 253      | 57%         | 51-62%        |                 |
| Divorced or separated                  | 211      | 89       | 40%         | 32-48%        |                 | 119      | 48       | 38%         | 28-48%        |                 | 92       | 41       | 44%         | 31-57%        |                 |
| Widowed                                | 127      | 63       | 44%         | 34-55%        |                 | 75       | 42       | 47%         | 34-60%        |                 | 52       | 21       | 35%         | 22-49%        |                 |
| Never married                          | 90       | 40       | 48%         | 35-62%        |                 | 67       | 33       | 50%         | 36-65%        |                 | 23       | 7        | 33%         | 9-57%         |                 |
| <b>Education</b>                       | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Less than high school                  | 119      | 41       | 41%         | 29-54%        |                 | 63       | 22       | 45%         | 29-60%        |                 | 56       | 19       | 32%         | 17-46%        |                 |
| High school grad or GED                | 333      | 180      | 54%         | 48-61%        |                 | 147      | 82       | 55%         | 46-65%        |                 | 186      | 98       | 52%         | 44-61%        |                 |
| College 1-3 years                      | 311      | 166      | 51%         | 44-58%        |                 | 167      | 84       | 51%         | 42-59%        |                 | 144      | 82       | 52%         | 43-62%        |                 |
| College grad                           | 323      | 201      | 62%         | 56-69%        |                 | 221      | 144      | 63%         | 56-71%        |                 | 102      | 57       | 58%         | 47-68%        |                 |
| Advanced degree                        | 333      | 215      | 66%         | 60-72%        |                 | 229      | 149      | 66%         | 59-73%        |                 | 104      | 66       | 63%         | 53-73%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 5-7. MEN REPORTING TO HAVE HAD A DIGITAL RECTAL EXAM (DRE) IN THE PAST YEAR, AMONG MEN OF ALL RACES AGE 50 YEARS AND OLDER AND AFRICAN AMERICAN MEN AGE 45-49 YEARS**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Employment Status</b>       | **       |          |             |               |                 | *        |          |             |               |                 | **       |          |             |               |                 |
| Employed for wages             | 544      | 292      | 55%         | 50-60%        |                 | 345      | 189      | 56%         | 50-61%        |                 | 199      | 103      | 51%         | 43-60%        |                 |
| Self-employed                  | 150      | 85       | 53%         | 43-63%        |                 | 88       | 48       | 52%         | 40-64%        |                 | 62       | 37       | 56%         | 43-69%        |                 |
| Retired                        | 633      | 387      | 63%         | 59-68%        |                 | 347      | 222      | 65%         | 59-71%        |                 | 286      | 165      | 59%         | 52-65%        |                 |
| Other                          | 91       | 38       | 45%         | 32-57%        |                 | 46       | 21       | 50%         | 33-66%        |                 | 45       | 17       | 31%         | 16-46%        |                 |
| <b>Household Income</b>        | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| <\$25,000                      | 196      | 83       | 46%         | 37-55%        |                 | 93       | 42       | 49%         | 37-61%        |                 | 103      | 41       | 37%         | 27-48%        |                 |
| \$25,000-<\$35,000             | 132      | 76       | 54%         | 43-65%        |                 | 68       | 36       | 53%         | 39-66%        |                 | 64       | 40       | 59%         | 44-73%        |                 |
| \$35,000-<\$50,000             | 185      | 97       | 52%         | 43-61%        |                 | 108      | 54       | 51%         | 40-61%        |                 | 77       | 43       | 57%         | 45-69%        |                 |
| \$50,000-<\$75,000             | 221      | 124      | 56%         | 48-64%        |                 | 127      | 77       | 60%         | 50-70%        |                 | 94       | 47       | 43%         | 31-56%        |                 |
| \$75,000 or greater            | 526      | 339      | 65%         | 60-70%        |                 | 332      | 217      | 65%         | 60-71%        |                 | 194      | 122      | 64%         | 57-71%        |                 |
| Don't know/not sure            | 59       | 23       | 36%         | 21-51%        |                 | 30       | 10       | 30%         | 12-48%        |                 | 29       | 13       | 52%         | 31-74%        |                 |
| Refused                        | 101      | 62       | 60%         | 48-72%        |                 | 70       | 46       | 63%         | 50-76%        |                 | 31       | 16       | 43%         | 22-65%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

## Chapter 6. Women's Health: Breast and Cervical Cancer Screening

Female breast cancer remains the most common reportable cancer and the second leading cause of cancer deaths (after lung cancer) among Maryland women. In 2002, breast cancer accounted for 3,574 newly diagnosed cases and 879 deaths among Maryland women.<sup>1</sup> In the same year, a total of 73 women died of cervical cancer in Maryland.<sup>2</sup> Among the 50 states and the District of Columbia for the period 1998 to 2002, Maryland women ranked 5th highest in breast cancer mortality and 26th highest in cervical cancer mortality.<sup>1</sup>

### 6.1 Breast cancer screening

Mammography and clinical breast exam (CBE) are the recommended tests to screen for breast cancer. The U.S. Preventive Services Task Force (USPSTF) recommends screening mammography every 1-2 years for women age 40 years and older.<sup>3</sup> The American Cancer Society (ACS) guidelines recommend yearly mammograms for women starting at age 40 years.<sup>4</sup> For women at increased risk for breast cancer (e.g., family history, genetic tendency, past breast cancer), the ACS recommends that they should talk with their doctors about starting mammography screening earlier, having additional tests, or having more frequent exams. The ACS recommends that women between the ages of 20 to 39 years should undergo a CBE every 3 years, and annually after age 40 years.

#### Prevalence of Mammography Screening

Among Maryland women age 40 years and older:

- Ninety-four percent (94%) reported ever having a mammogram (Table 6-1 and Chart 6-1).
- Although overall prevalence of breast cancer screening is high, the proportion of women ever having a mammogram was statistically significantly lower among those age 40 to 49 years (compared to older age groups), women who were not White or African American (compared to White women), or women who were never married (compared to married or widowed).
- Sixty-eight percent (68%) of all female respondents reported having a mammogram in the past year. (Data not shown in tables.)

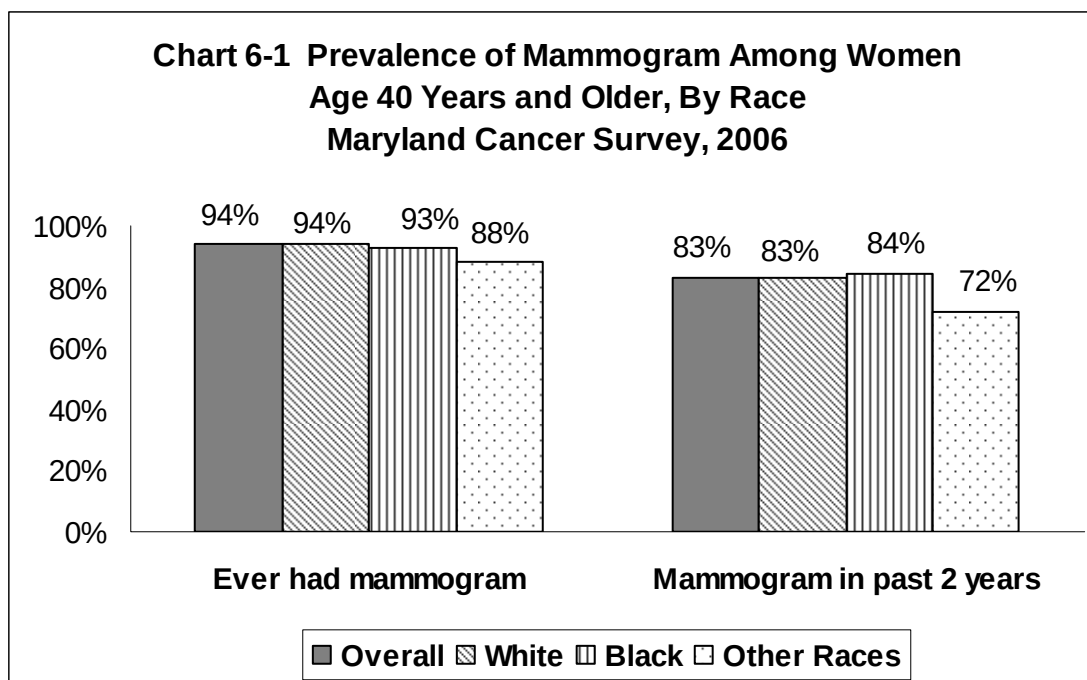
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<sup>1</sup> Maryland Department of Health and Mental Hygiene. Cancer Report 2006. Baltimore, MD; 2006. Available on-line at [http://www.fha.state.md.us/cancer/surveillance/pdf/CRF\\_Can\\_Rpt\\_2006\\_Final\\_PNO\\_v9u.pdf](http://www.fha.state.md.us/cancer/surveillance/pdf/CRF_Can_Rpt_2006_Final_PNO_v9u.pdf). Last accessed July 11, 2007.

<sup>2</sup> Cervical cancer incidence data for 2002 not available as of June 2007.

<sup>3</sup> U.S. Preventive Services Task Force. Screening for Breast Cancer. February 2002. Available on-line at <http://www.ahrq.gov/clinic/uspstf/uspstfbrca.htm>. Last accessed July 11, 2007.

<sup>4</sup> American Cancer Society Cancer Detection Guidelines. Available at [http://www.cancer.org/docroot/PED/content/PED\\_2\\_3X\\_ACS\\_Cancer\\_Detection\\_Guidelines\\_36.asp?sitearea=PED](http://www.cancer.org/docroot/PED/content/PED_2_3X_ACS_Cancer_Detection_Guidelines_36.asp?sitearea=PED). Last accessed July 11, 2007.



The HP 2010 has established a target of increasing to 70% the proportion of women age 40 years and older who have received a mammogram within the preceding 2 years.<sup>5</sup>

- Eighty-three percent (83%) of women surveyed reported having a mammogram in the last 2 years, surpassing the Healthy People 2010 target of 70%. (Table 6-2 and Chart 6-1).
  - o Women living in rural areas who had less than a high school education had the lowest prevalence of having a mammogram in the 2 years preceding the survey (64%).
  - o Statistically significantly lower rates of mammogram screening within the past 2 years were also found among:
    - urban women of races other than White or African American (71%);
    - women ages 40-49 years (77%);
    - women who reported their employment status as self-employed or “other” (76% and 77%, respectively); and
    - women with a household income less than \$25,000 (73%).
- Female respondents who have never had a mammogram or have not had one in the past 2 years were asked to name the most important reason for lack of screening (Table 6-3). The most frequently cited reason was that the respondent put it off or didn’t get around to it (20%). Other frequently cited reasons include: they had no reason or never thought about it (17%); the doctor didn’t order the test or didn’t say it was needed (12%); and the respondent didn’t think she needed the test (11%).

<sup>5</sup> U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. Understanding and Improving Health; Objectives for Improving Health. Vol. I. Cancer. Washington, DC: U.S. Government Printing Office, November 2000. <http://www.healthypeople.gov/Document/HTML/Volume1/03Cancer.htm>. Last accessed July 11, 2007.

### HCP Recommendations and Mammography Screening

Among Maryland women age 40 years and older who had seen a physician in the last year:

- Eighty-six percent (86%) of all women reported that within the past year, they had received a recommendation from their HCP to have a mammogram (Table 6-4).
- Overall, the following groups of women were more likely to report receiving a mammogram recommendation from their HCP:
  - between the ages of 50 and 74 years;
  - with a high school education or higher; and
  - with annual household incomes of \$35,000 or more compared to an income of less than \$25,000.
- Among the women who reported that a health care provider recommended a mammogram in the last year, 77% reported having the test within the last year. Among women who did not have an HCP recommendation, only 22% reported having a mammogram within the last year. (Data not shown in tables.)
- Ninety-three percent (93%) of women with a family history of breast cancer reported receiving an HCP recommendation to have mammography within the past year. (Data not shown in tables.)

### Family History of Breast Cancer and Mammography Screening Compliance

Having a first-degree relative (FDR; e.g., mother, sister, or daughter) diagnosed with breast cancer increases a woman's risk for developing breast cancer. In the MCS 2006, female respondents with a family history of breast cancer had a significantly higher prevalence of mammography screening than women without a family history. (Data not shown in tables.)

- Sixteen percent (16%) of women age 40 years and older reported they had an FDR who had been diagnosed with breast cancer.
- Ninety-six percent (96%) of those reporting an FDR with breast cancer have ever had a mammogram. This figure was significantly higher than the mammography rate of 93% among women without an FDR with breast cancer.
- When looking at mammography in the preceding year, 73% of women with an FDR with breast cancer reported having the test compared to 68% of women without that history.

## **6.2 Cervical cancer screening**

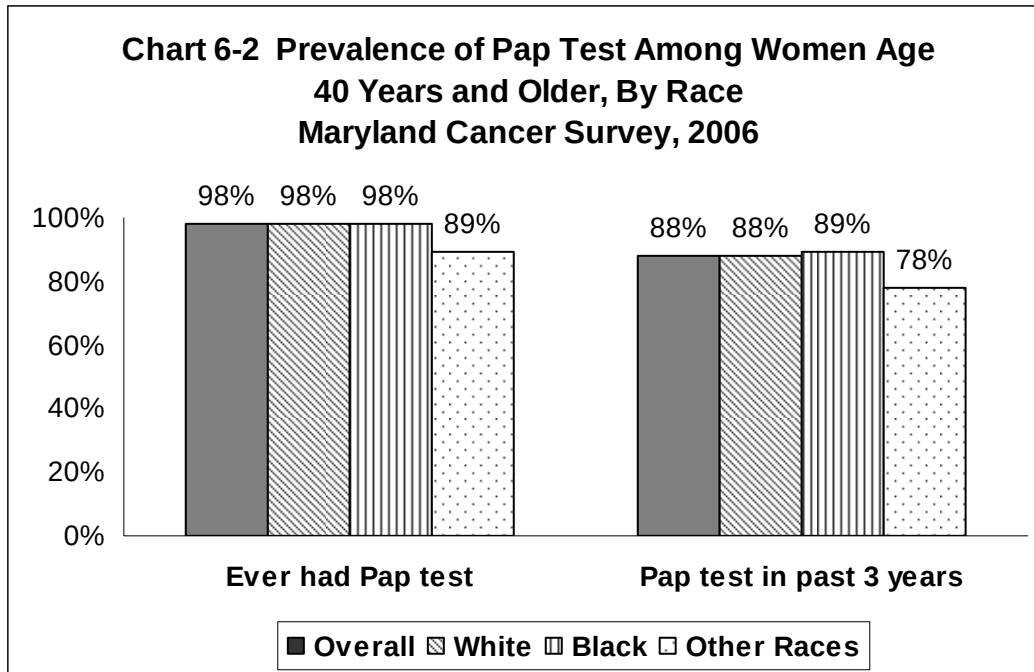
Cervical cytology (or the Pap test) is the screening test that is recommended for the early detection of pre-malignant and malignant changes of the cervix. The ACS recommends that women should begin cervical cancer screening no later than the age of 21 years, and that screening should be done every year with the regular Pap test or every 2 years using the newer liquid-based Pap test.<sup>4</sup> Beginning at age 30 years, women who have had three normal Pap test results in a row may get screened every 2 to 3 years. According to ACS guidelines, women 70 years of age or older who have had three or more normal Pap tests in a row and no abnormal Pap test results in the last 10 years may choose to stop having cervical cancer screening. Screening after total hysterectomy (removal of the uterus and cervix) is not necessary unless the woman has had cervical cancer or pre-cancer. Women who have had a hysterectomy but still have an intact cervix are advised to continue to be screened according to the guidelines.

HP 2010 has established the following targets for cervical cancer screening among women age 18 years and older:

- Increase to 97% the proportion of women who have ever had a Pap test; and
- Increase to 90% the proportion of women who received a Pap test within the preceding 3 years.

#### Prevalence of Pap Test Screening

- Among Maryland women age 40 years and older who have an intact cervix, 98% reported ever having a Pap test (Table 6-5 and Chart 6-2).
- While the vast majority of women surveyed have had a Pap test at least once in their life, there were statistically significant differences in prevalence of screening by age and race (Table 6-5):
  - Women age 75 years and older reported lower prevalence of ever having a Pap test (95%) than women age 50 to 64 years; and
  - Women of other races had a significantly lower prevalence of ever having a Pap test (89%) compared to White or African American women.
- Seventy-two percent (72%) of women had a Pap test within the past year. (Data not shown in tables.)
- Eighty-eight percent (88%) of Maryland women age 40 years and older had a Pap test within the last 3 years (Table 6-6 and Chart 6-2), slightly below the HP 2010 target of 90%. However, the HP 2010 target was written before guidelines changed to allow longer intervals for certain women or certain tests.
- The prevalence of having a Pap test in the last 3 years was significantly lower among the following groups of women (Table 6-6):
  - Age 75 years and older;
  - Race other than White or African American;
  - Less than a high school education; and
  - Annual household income less than \$50,000.
- Among women who reported having a Pap test in the preceding 3 years, 94% reported having their previous Pap test no more than 3 years prior. Of all women surveyed, 83% were following the recommendation to have repeat Pap testing at least as frequently as 3 year intervals. (Data not shown in tables.)
- Of women who said they never had a Pap test or have not had a Pap test in the last 3 years, almost one-fourth (24%) said they had no reason or they never thought about having the test. Other commonly cited reasons included: the doctor didn't order it (18%), the respondent put it off or didn't get around to it (11%); or they didn't know they needed the test (10%) (Table 6-7).



#### HCP Recommendations and Pap Test Screening

Among Maryland women age 40 years and older who had seen a physician in the last year:

- Seventy-nine percent (79%) reported they received a recommendation to have a Pap test (Table 6-8). While the majority of women in all age groups reported that an HCP recommended a Pap test in the last year, such recommendations were less prevalent among women age 65 years and older, those with less than a high school education, retirees, and women at lower income levels.
- Among women who said that a health care provider had recommended a Pap test in the last year, 86% reported having the test within the last year.
- In comparison, 21% of women who did not receive an HCP recommendation reported having a Pap test within the last year. (Data not shown in tables.)

**TABLE 6-1. WOMEN REPORTING TO HAVE EVER HAD A MAMMOGRAM, AMONG THOSE AGE 40 YEARS AND OLDER**

|                                           | TOTAL ~ |      |      |        |          | URBAN ~ |      |      |         |          | RURAL ~ |      |      |        |          |
|-------------------------------------------|---------|------|------|--------|----------|---------|------|------|---------|----------|---------|------|------|--------|----------|
| Selected Characteristic                   | N       | n    | wt % | 95% CI | Stat Sig | N       | n    | wt % | 95% CI  | Stat Sig | N       | n    | wt % | 95% CI | Stat Sig |
| <b>Female Population</b>                  | 3233    | 3048 | 94%  | 93-95% |          | 1963    | 1858 | 94%  | 93-95%  |          | 1270    | 1190 | 93%  | 92-95% |          |
| <b>Age</b>                                | **      |      |      |        |          | **      |      |      |         |          | **      |      |      |        |          |
| 40-49 years                               | 844     | 741  | 88%  | 85-90% |          | 527     | 460  | 87%  | 84-91%  |          | 317     | 281  | 89%  | 85-93% |          |
| 50-64 years                               | 1281    | 1237 | 97%  | 96-98% |          | 790     | 766  | 97%  | 96-98%  |          | 491     | 471  | 96%  | 95-98% |          |
| 65-74 years                               | 598     | 582  | 97%  | 96-99% |          | 343     | 336  | 97%  | 96-99%  |          | 255     | 246  | 97%  | 94-99% |          |
| 75 years and older                        | 510     | 488  | 97%  | 96-98% |          | 303     | 296  | 99%  | 97-100% |          | 207     | 192  | 91%  | 87-96% |          |
| <b>Race</b>                               | **      |      |      |        |          | **      |      |      |         |          | ^       |      |      |        |          |
| White                                     | 2523    | 2392 | 94%  | 93-96% |          | 1393    | 1330 | 95%  | 93-96%  |          | 1130    | 1062 | 94%  | 92-95% |          |
| African American or Black                 | 592     | 559  | 93%  | 91-96% |          | 479     | 452  | 93%  | 90-96%  |          | 113     | 107  | 92%  | 85-98% |          |
| Other                                     | 118     | 97   | 88%  | 81-94% |          | 91      | 76   | 88%  | 81-94%  |          | 27      | 21   | 83%  | 69-98% |          |
| <b>Marital Status</b>                     | **      |      |      |        |          | **      |      |      |         |          | **      |      |      |        |          |
| Married or partner of<br>unmarried couple | 1724    | 1638 | 95%  | 93-96% |          | 1008    | 960  | 95%  | 93-96%  |          | 716     | 678  | 94%  | 92-96% |          |
| Divorced or separated                     | 616     | 571  | 92%  | 90-95% |          | 400     | 376  | 93%  | 90-96%  |          | 216     | 195  | 90%  | 85-95% |          |
| Widowed                                   | 634     | 612  | 97%  | 95-98% |          | 360     | 349  | 97%  | 95-99%  |          | 274     | 263  | 96%  | 93-98% |          |
| Never married                             | 245     | 216  | 86%  | 80-92% |          | 182     | 162  | 86%  | 79-93%  |          | 63      | 54   | 86%  | 76-96% |          |
| <b>Education</b>                          | ^       |      |      |        |          | ^       |      |      |         |          | ^       |      |      |        |          |
| Less than high school                     | 262     | 238  | 91%  | 87-95% |          | 134     | 121  | 91%  | 86-96%  |          | 128     | 117  | 92%  | 87-97% |          |
| High school grad or GED                   | 947     | 894  | 94%  | 92-96% |          | 471     | 441  | 93%  | 90-96%  |          | 476     | 453  | 96%  | 94-98% |          |
| College 1-3 years                         | 828     | 777  | 93%  | 91-95% |          | 489     | 465  | 94%  | 92-97%  |          | 339     | 312  | 90%  | 86-94% |          |
| College grad                              | 659     | 628  | 95%  | 93-97% |          | 456     | 437  | 95%  | 93-97%  |          | 203     | 191  | 94%  | 90-98% |          |
| Advanced degree                           | 528     | 503  | 94%  | 91-97% |          | 407     | 389  | 94%  | 91-97%  |          | 121     | 114  | 93%  | 87-99% |          |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1



**TABLE 6-1. WOMEN REPORTING TO HAVE EVER HAD A MAMMOGRAM, AMONG THOSE AGE 40 YEARS AND OLDER**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Employment Status</b>       | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| Employed for wages             | 1385     | 1294     | 93%         | 91-95%        |                 | 872      | 815      | 93%         | 91-95%        |                 | 513      | 479      | 93%         | 91-96%        |                 |
| Self-employed                  | 218      | 202      | 89%         | 83-95%        |                 | 139      | 128      | 87%         | 80-95%        |                 | 79       | 74       | 95%         | 90-100%       |                 |
| Retired                        | 1085     | 1053     | 98%         | 97-99%        |                 | 625      | 616      | 99%         | 98-100%       |                 | 460      | 437      | 95%         | 92-97%        |                 |
| Other                          | 534      | 489      | 91%         | 89-94%        |                 | 318      | 291      | 92%         | 88-95%        |                 | 216      | 198      | 90%         | 85-95%        |                 |
| <b>Household Income</b>        | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| <\$25,000                      | 624      | 570      | 90%         | 87-93%        |                 | 344      | 311      | 89%         | 85-93%        |                 | 280      | 259      | 93%         | 90-96%        |                 |
| \$25,000-<\$35,000             | 297      | 282      | 95%         | 92-98%        |                 | 171      | 164      | 95%         | 91-99%        |                 | 126      | 118      | 93%         | 88-98%        |                 |
| \$35,000-<\$50,000             | 381      | 357      | 92%         | 88-96%        |                 | 222      | 208      | 92%         | 87-97%        |                 | 159      | 149      | 93%         | 87-98%        |                 |
| \$50,000-<\$75,000             | 444      | 423      | 94%         | 92-97%        |                 | 254      | 241      | 94%         | 91-98%        |                 | 190      | 182      | 95%         | 91-99%        |                 |
| \$75,000 or greater            | 916      | 873      | 95%         | 94-97%        |                 | 633      | 610      | 96%         | 94-98%        |                 | 283      | 263      | 92%         | 89-96%        |                 |
| Don't know/not sure            | 243      | 229      | 94%         | 91-98%        |                 | 139      | 132      | 95%         | 91-99%        |                 | 104      | 97       | 91%         | 85-98%        |                 |
| Refused                        | 328      | 314      | 95%         | 92-98%        |                 | 200      | 192      | 95%         | 91-99%        |                 | 128      | 122      | 95%         | 91-99%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 6-2. WOMEN REPORTING TO HAVE HAD A MAMMOGRAM IN THE LAST TWO YEARS, AMONG THOSE AGE 40 YEARS AND OLDER**

|                                           | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|-------------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>            | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Female Population</b>                  | 3233     | 2670     | 83%         | 81-84%        |                 | 1963     | 1627     | 83%         | 81-85%        |                 | 1270     | 1043     | 82%         | 79-84%        |                 |
| <b>Age</b>                                | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| 40-49 years                               | 844      | 650      | 77%         | 74-80%        |                 | 527      | 404      | 77%         | 73-81%        |                 | 317      | 246      | 76%         | 71-82%        |                 |
| 50-64 years                               | 1281     | 1089     | 85%         | 83-88%        |                 | 790      | 668      | 85%         | 82-88%        |                 | 491      | 421      | 87%         | 84-90%        |                 |
| 65-74 years                               | 598      | 527      | 90%         | 87-93%        |                 | 343      | 309      | 91%         | 88-95%        |                 | 255      | 218      | 85%         | 80-90%        |                 |
| 75 years and older                        | 510      | 404      | 81%         | 78-85%        |                 | 303      | 246      | 83%         | 79-88%        |                 | 207      | 158      | 76%         | 69-82%        |                 |
| <b>Race</b>                               | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| White                                     | 2523     | 2088     | 83%         | 81-84%        |                 | 1393     | 1162     | 83%         | 81-85%        |                 | 1130     | 926      | 82%         | 79-84%        |                 |
| African American or Black                 | 592      | 501      | 84%         | 81-88%        |                 | 479      | 404      | 85%         | 81-88%        |                 | 113      | 97       | 82%         | 73-91%        |                 |
| Other                                     | 118      | 81       | 72%         | 63-81%        |                 | 91       | 61       | 71%         | 61-81%        |                 | 27       | 20       | 81%         | 65-96%        |                 |
| <b>Marital Status</b>                     | **       |          |             |               |                 | **       |          |             |               |                 | *        |          |             |               |                 |
| Married or partner of<br>unmarried couple | 1724     | 1471     | 85%         | 83-87%        |                 | 1008     | 860      | 85%         | 82-87%        |                 | 716      | 611      | 84%         | 80-87%        |                 |
| Divorced or separated                     | 616      | 485      | 78%         | 74-82%        |                 | 400      | 317      | 78%         | 74-83%        |                 | 216      | 168      | 77%         | 70-83%        |                 |
| Widowed                                   | 634      | 514      | 83%         | 80-86%        |                 | 360      | 299      | 85%         | 81-89%        |                 | 274      | 215      | 77%         | 71-82%        |                 |
| Never married                             | 245      | 189      | 76%         | 69-83%        |                 | 182      | 140      | 75%         | 68-83%        |                 | 63       | 49       | 81%         | 70-92%        |                 |
| <b>Education</b>                          | **       |          |             |               |                 | *        |          |             |               |                 | **       |          |             |               |                 |
| Less than high school                     | 262      | 188      | 73%         | 67-79%        |                 | 134      | 101      | 76%         | 69-84%        |                 | 128      | 87       | 64%         | 54-74%        |                 |
| High school grad or GED                   | 947      | 784      | 83%         | 80-86%        |                 | 471      | 385      | 82%         | 78-86%        |                 | 476      | 399      | 85%         | 82-89%        |                 |
| College 1-3 years                         | 828      | 666      | 80%         | 77-83%        |                 | 489      | 396      | 81%         | 77-85%        |                 | 339      | 270      | 78%         | 73-83%        |                 |
| College grad                              | 659      | 566      | 86%         | 83-89%        |                 | 456      | 387      | 86%         | 82-89%        |                 | 203      | 179      | 88%         | 82-93%        |                 |
| Advanced degree                           | 528      | 459      | 86%         | 82-89%        |                 | 407      | 354      | 86%         | 82-90%        |                 | 121      | 105      | 84%         | 76-92%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 6-2. WOMEN REPORTING TO HAVE HAD A MAMMOGRAM IN THE LAST TWO YEARS, AMONG THOSE AGE 40 YEARS AND OLDER**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Employment Status</b>       | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Employed for wages             | 1385     | 1166     | 84%         | 81-86%        |                 | 872      | 724      | 83%         | 80-86%        |                 | 513      | 442      | 86%         | 82-89%        |                 |
| Self-employed                  | 218      | 173      | 76%         | 69-83%        |                 | 139      | 111      | 75%         | 67-84%        |                 | 79       | 62       | 80%         | 70-90%        |                 |
| Retired                        | 1085     | 914      | 87%         | 85-89%        |                 | 625      | 541      | 89%         | 86-91%        |                 | 460      | 373      | 81%         | 77-85%        |                 |
| Other                          | 543      | 410      | 77%         | 72-81%        |                 | 318      | 245      | 77%         | 72-82%        |                 | 216      | 165      | 74%         | 67-81%        |                 |
| <b>Household Income</b>        | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| <\$25,000                      | 624      | 457      | 73%         | 69-77%        |                 | 344      | 247      | 72%         | 67-78%        |                 | 280      | 210      | 75%         | 69-81%        |                 |
| \$25,000-<\$35,000             | 297      | 235      | 78%         | 73-84%        |                 | 171      | 137      | 79%         | 72-86%        |                 | 126      | 98       | 78%         | 69-86%        |                 |
| \$35,000-<\$50,000             | 381      | 311      | 80%         | 74-85%        |                 | 222      | 179      | 79%         | 73-86%        |                 | 159      | 132      | 82%         | 75-89%        |                 |
| \$50,000-<\$75,000             | 444      | 382      | 85%         | 81-89%        |                 | 254      | 218      | 86%         | 81-90%        |                 | 190      | 164      | 84%         | 78-90%        |                 |
| \$75,000 or greater            | 916      | 801      | 87%         | 85-90%        |                 | 633      | 558      | 88%         | 85-91%        |                 | 283      | 243      | 84%         | 79-89%        |                 |
| Don't know/not sure            | 243      | 200      | 84%         | 79-89%        |                 | 139      | 117      | 86%         | 81-92%        |                 | 104      | 83       | 77%         | 67-86%        |                 |
| Refused                        | 328      | 284      | 86%         | 82-91%        |                 | 200      | 171      | 85%         | 80-91%        |                 | 128      | 113      | 89%         | 83-95%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 6-3. RESPONSES TO THE QUESTION "WHAT WAS THE MOST IMPORTANT REASON YOU HAVE NEVER HAD/NOT HAD A MAMMOGRAM IN THE LAST TWO YEARS?" \***

| <b>Selected Response</b>                            | <b>wt %</b> |
|-----------------------------------------------------|-------------|
| Put it off/didn't get around to it                  | 20%         |
| No reason, never thought about it                   | 17%         |
| Doctor didn't order it/didn't say I needed it       | 12%         |
| Didn't need/ didn't know I needed this type of test | 11%         |
| Other reasons (unspecified)                         | 10%         |
| Too painful, unpleasant, or embarrassing            | 9%          |
| Haven't had any problems                            | 8%          |
| Too expensive/no insurance/cost of test             | 8%          |
| Don't have a doctor                                 | 3%          |
| Didn't want to know I had cancer                    | 1%          |

\*Question asked of 565 female respondents, age 40 years or older, who reported they have never had a mammogram or have not had a mammogram in the last 2 years. More than one response could be given per respondent.

**TABLE 6-4. WOMEN REPORTING THAT A HEALTH CARE PROVIDER RECOMMENDED BREAST CANCER SCREENING WITH MAMMOGRAM IN THE PAST YEAR, AMONG THOSE AGE 40 YEARS AND OLDER WHO SAW A PROVIDER IN THE PAST YEAR**

| <b>Selected Characteristic</b>         | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
|----------------------------------------|----------|----------|-------------|---------------|-----------------|
| <b>Female Population</b>               | 3192     | 2745     | 86%         | 85-88%        |                 |
| <b>Area of Residence</b>               |          |          |             |               | ^               |
| Urban                                  | 1937     | 1671     | 86%         | 84-88%        |                 |
| Rural                                  | 1255     | 1074     | 87%         | 85-89%        |                 |
| <b>Age</b>                             |          |          |             |               | **              |
| 40-49 years                            | 832      | 714      | 85%         | 82-88%        |                 |
| 50-64 years                            | 1262     | 1112     | 89%         | 87-91%        |                 |
| 65-74 years                            | 588      | 516      | 88%         | 85-91%        |                 |
| 75 years and above                     | 510      | 403      | 81%         | 77-85%        |                 |
| <b>Race</b>                            |          |          |             |               | ^               |
| White                                  | 2496     | 2150     | 86%         | 85-88%        |                 |
| African American or Black              | 582      | 505      | 87%         | 83-90%        |                 |
| Other                                  | 114      | 90       | 83%         | 75-91%        |                 |
| <b>Marital Status</b>                  |          |          |             |               | **              |
| Married or partner of unmarried couple | 1706     | 1516     | 88%         | 86-90%        |                 |
| Divorced or separated                  | 601      | 498      | 82%         | 78-86%        |                 |
| Widowed                                | 630      | 524      | 85%         | 81-88%        |                 |
| Never married                          | 242      | 195      | 81%         | 74-87%        |                 |
| <b>Education</b>                       |          |          |             |               | **              |
| Less than high school                  | 258      | 199      | 77%         | 71-83%        |                 |
| High school grad or GED                | 934      | 804      | 86%         | 83-89%        |                 |
| College 1-3 years                      | 820      | 694      | 86%         | 84-89%        |                 |
| College grad                           | 653      | 576      | 88%         | 85-91%        |                 |
| Advanced degree                        | 519      | 467      | 89%         | 85-92%        |                 |
| <b>Employment Status</b>               |          |          |             |               | **              |
| Employed for wages                     | 1369     | 1209     | 88%         | 85-90%        |                 |
| Self-employed                          | 213      | 183      | 86%         | 80-91%        |                 |
| Retired                                | 1077     | 920      | 87%         | 85-89%        |                 |
| Other                                  | 523      | 425      | 82%         | 78-85%        |                 |
| <b>Household Income</b>                |          |          |             |               | **              |
| <\$25,000                              | 602      | 466      | 78%         | 74-82%        |                 |
| \$25,000-<\$35,000                     | 293      | 244      | 84%         | 79-89%        |                 |
| \$35,000-<\$50,000                     | 375      | 329      | 86%         | 81-91%        |                 |
| \$50,000-<\$75,000                     | 440      | 393      | 87%         | 84-91%        |                 |
| \$75,000 or greater                    | 910      | 822      | 90%         | 88-92%        |                 |
| Don't know/not sure                    | 245      | 200      | 83%         | 78-89%        |                 |
| Refused                                | 327      | 291      | 89%         | 85-93%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 6-5. WOMEN REPORTING TO HAVE EVER HAD A PAP TEST, AMONG THOSE AGE 40 YEARS AND OLDER WHO HAVE NOT HAD A HYSTERECTOMY**

|                                        | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|----------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Female Population</b>               | 2146     | 2102     | 98%         | 97-99%        |                 | 1325     | 1296     | 98%         | 97-99%        |                 | 821      | 806      | 98%         | 97-99%        |                 |
| <b>Age</b>                             | **       |          |             |               |                 | *        |          |             |               |                 | **       |          |             |               |                 |
| 40-49 years                            | 701      | 688      | 98%         | 97-99%        |                 | 448      | 438      | 98%         | 96-99%        |                 | 253      | 250      | 99%         | 98-100%       |                 |
| 50-64 years                            | 855      | 846      | 99%         | 98-100%       |                 | 531      | 525      | 99%         | 98-100%       |                 | 324      | 321      | 99%         | 98-100%       |                 |
| 65-74 years                            | 321      | 312      | 96%         | 93-99%        |                 | 188      | 183      | 96%         | 93-100%       |                 | 133      | 129      | 96%         | 93-100%       |                 |
| 75 years and above                     | 269      | 256      | 95%         | 92-98%        |                 | 158      | 150      | 95%         | 92-99%        |                 | 111      | 106      | 94%         | 89-100%       |                 |
| <b>Race</b>                            | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| White                                  | 1718     | 1690     | 98%         | 97-99%        |                 | 972      | 956      | 98%         | 97-99%        |                 | 746      | 734      | 98%         | 98-99%        |                 |
| African American or Black              | 344      | 336      | 98%         | 97-100%       |                 | 284      | 278      | 99%         | 97-100%       |                 | 60       | 58       | 97%         | 92-100%       |                 |
| Other                                  | 84       | 76       | 89%         | 81-97%        |                 | 69       | 62       | 89%         | 80-97%        |                 | 15       | 14       | 97%         | 92-100%       |                 |
| <b>Marital Status</b>                  | **       |          |             |               |                 | *        |          |             |               |                 | *        |          |             |               |                 |
| Married or partner of unmarried couple | 1228     | 1210     | 98%         | 97-99%        |                 | 736      | 724      | 98%         | 97-99%        |                 | 492      | 486      | 99%         | 98-100%       |                 |
| Divorced or separated                  | 393      | 387      | 99%         | 98-100%       |                 | 254      | 250      | 99%         | 97-100%       |                 | 139      | 137      | 98%         | 95-100%       |                 |
| Widowed                                | 336      | 323      | 95%         | 91-98%        |                 | 191      | 183      | 94%         | 90-99%        |                 | 145      | 140      | 96%         | 92-100%       |                 |
| Never married                          | 180      | 173      | 97%         | 94-99%        |                 | 135      | 130      | 97%         | 94-100%       |                 | 45       | 43       | 94%         | 85-100%       |                 |
| <b>Education</b>                       | *        |          |             |               |                 | *        |          |             |               |                 | ^        |          |             |               |                 |
| Less than high school                  | 138      | 131      | 95%         | 91-99%        |                 | 68       | 63       | 94%         | 89-99%        |                 | 70       | 68       | 96%         | 91-100%       |                 |
| High school grad or GED                | 579      | 563      | 97%         | 95-99%        |                 | 283      | 274      | 96%         | 93-99%        |                 | 296      | 289      | 98%         | 97-100%       |                 |
| College 1-3 years                      | 528      | 518      | 98%         | 97-99%        |                 | 317      | 310      | 98%         | 96-100%       |                 | 211      | 208      | 98%         | 96-100%       |                 |
| College grad                           | 501      | 495      | 99%         | 98-100%       |                 | 347      | 343      | 99%         | 97-100%       |                 | 154      | 152      | 99%         | 97-100%       |                 |
| Advanced degree                        | 399      | 394      | 99%         | 97-100%       |                 | 309      | 305      | 99%         | 97-100%       |                 | 90       | 89       | 99%         | 97-100%       |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 6-5. WOMEN REPORTING TO HAVE EVER HAD A PAP TEST, AMONG THOSE AGE 40 YEARS AND OLDER WHO HAVE NOT HAD A HYSTERECTOMY**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Employment Status</b>       | ^        |          |             |               |                 | ^        |          |             |               |                 | **       |          |             |               |                 |
| Employed for wages             | 1020     | 1007     | 99%         | 98-99%        |                 | 651      | 639      | 98%         | 97-99%        |                 | 369      | 368      | 100%        | 100%          |                 |
| Self-employed                  | 177      | 174      | 98%         | 95-100%       |                 | 115      | 114      | 98%         | 94-100%       |                 | 62       | 60       | 97%         | 93-100%       |                 |
| Retired                        | 576      | 560      | 97%         | 95-99%        |                 | 327      | 318      | 97%         | 95-99%        |                 | 249      | 242      | 97%         | 94-99%        |                 |
| Other                          | 363      | 352      | 97%         | 96-99%        |                 | 224      | 218      | 98%         | 96-100%       |                 | 139      | 134      | 97%         | 94-100%       |                 |
| <b>Household Income</b>        | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| <\$25,000                      | 359      | 341      | 94%         | 91-97%        |                 | 199      | 186      | 93%         | 89-97%        |                 | 160      | 155      | 97%         | 95-100%       |                 |
| \$25,000-<\$35,000             | 174      | 169      | 96%         | 92-100%       |                 | 97       | 95       | 96%         | 91-100%       |                 | 77       | 74       | 96%         | 91-100%       |                 |
| \$35,000-<\$50,000             | 240      | 236      | 98%         | 95-100%       |                 | 141      | 138      | 98%         | 94-100%       |                 | 99       | 98       | 98%         | 95-100%       |                 |
| \$50,000-<\$75,000             | 314      | 314      | 100%        | 100%          |                 | 175      | 175      | 100%        | 100%          |                 | 139      | 139      | 100%        | 100%          |                 |
| \$75,000 or greater            | 708      | 701      | 99%         | 98-100%       |                 | 496      | 491      | 99%         | 98-100%       |                 | 212      | 210      | 99%         | 99-100%       |                 |
| Don't know/not sure            | 150      | 141      | 94%         | 90-98%        |                 | 86       | 81       | 95%         | 90-99%        |                 | 64       | 60       | 92%         | 83-100%       |                 |
| Refused                        | 201      | 200      | 99%         | 98-100%       |                 | 131      | 130      | 99%         | 98-100%       |                 | 70       | 70       | 100%        | 100%          |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 6-6. WOMEN REPORTING TO HAVE HAD A PAP TEST IN THE LAST THREE YEARS, AMONG THOSE AGE 40 YEARS AND OLDER WHO HAVE NOT HAD A HYSTERECTOMY**

|                                           | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|-------------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>            | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Female Population</b>                  | 2146     | 1848     | 88%         | 86-89%        |                 | 1325     | 1151     | 88%         | 86-90%        |                 | 821      | 697      | 86%         | 84-89%        |                 |
| <b>Age</b>                                | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| 40-49 years                               | 701      | 646      | 92%         | 90-95%        |                 | 448      | 416      | 93%         | 90-95%        |                 | 253      | 230      | 91%         | 87-95%        |                 |
| 50-64 years                               | 855      | 767      | 90%         | 88-92%        |                 | 531      | 473      | 90%         | 87-92%        |                 | 324      | 294      | 91%         | 88-95%        |                 |
| 65-74 years                               | 321      | 270      | 84%         | 79-89%        |                 | 188      | 162      | 85%         | 79-91%        |                 | 133      | 108      | 81%         | 74-89%        |                 |
| 75 years and above                        | 269      | 165      | 64%         | 57-70%        |                 | 158      | 100      | 66%         | 58-74%        |                 | 111      | 65       | 57%         | 48-67%        |                 |
| <b>Race</b>                               | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| White                                     | 1718     | 1481     | 88%         | 87-90%        |                 | 972      | 848      | 89%         | 87-91%        |                 | 746      | 633      | 86%         | 84-89%        |                 |
| African American or Black                 | 344      | 301      | 89%         | 85-92%        |                 | 284      | 249      | 89%         | 85-93%        |                 | 60       | 52       | 86%         | 77-96%        |                 |
| Other                                     | 84       | 66       | 78%         | 67-88%        |                 | 69       | 54       | 77%         | 66-88%        |                 | 15       | 12       | 88%         | 74-100%       |                 |
| <b>Marital Status</b>                     | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Married or partner of<br>unmarried couple | 1228     | 1118     | 91%         | 89-93%        |                 | 736      | 673      | 91%         | 89-94%        |                 | 492      | 445      | 90%         | 87-93%        |                 |
| Divorced or separated                     | 393      | 331      | 87%         | 83-91%        |                 | 254      | 220      | 88%         | 84-92%        |                 | 139      | 111      | 80%         | 73-88%        |                 |
| Widowed                                   | 336      | 244      | 73%         | 68-79%        |                 | 191      | 139      | 74%         | 67-81%        |                 | 145      | 105      | 72%         | 64-80%        |                 |
| Never married                             | 180      | 146      | 80%         | 72-88%        |                 | 135      | 110      | 80%         | 72-88%        |                 | 45       | 36       | 79%         | 65-94%        |                 |
| <b>Education</b>                          | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Less than high school                     | 138      | 91       | 68%         | 59-77%        |                 | 68       | 47       | 72%         | 61-83%        |                 | 70       | 44       | 58%         | 44-71%        |                 |
| High school grad or GED                   | 579      | 485      | 85%         | 82-88%        |                 | 283      | 233      | 84%         | 80-89%        |                 | 296      | 252      | 87%         | 82-91%        |                 |
| College 1-3 years                         | 528      | 449      | 87%         | 84-90%        |                 | 317      | 271      | 87%         | 83-91%        |                 | 211      | 178      | 86%         | 81-91%        |                 |
| College grad                              | 501      | 454      | 93%         | 90-95%        |                 | 347      | 315      | 93%         | 90-95%        |                 | 154      | 139      | 93%         | 89-97%        |                 |
| Advanced degree                           | 399      | 368      | 92%         | 88-95%        |                 | 309      | 284      | 91%         | 87-95%        |                 | 90       | 84       | 94%         | 90-99%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006



**TABLE 6-6. WOMEN REPORTING TO HAVE HAD A PAP TEST IN THE LAST THREE YEARS, AMONG THOSE AGE 40 YEARS AND OLDER WHO HAVE NOT HAD A HYSTERECTOMY**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Employment Status</b>       |          |          |             |               | **              |          |          |             |               | **              |          |          |             |               | **              |
| Employed for wages             | 1020     | 934      | 92%         | 90-94%        |                 | 651      | 593      | 91%         | 89-94%        |                 | 369      | 341      | 93%         | 91-96%        |                 |
| Self-employed                  | 177      | 161      | 91%         | 86-96%        |                 | 115      | 106      | 92%         | 86-98%        |                 | 62       | 55       | 89%         | 80-98%        |                 |
| Retired                        | 576      | 443      | 79%         | 75-83%        |                 | 327      | 257      | 81%         | 76-85%        |                 | 249      | 186      | 74%         | 68-80%        |                 |
| Other                          | 363      | 303      | 86%         | 82-90%        |                 | 224      | 189      | 87%         | 82-91%        |                 | 139      | 114      | 83%         | 76-90%        |                 |
| <b>Household Income</b>        |          |          |             |               | **              |          |          |             |               | **              |          |          |             |               | **              |
| <\$25,000                      | 359      | 247      | 72%         | 66-77%        |                 | 199      | 136      | 72%         | 66-79%        |                 | 160      | 111      | 70%         | 61-78%        |                 |
| \$25,000-<\$35,000             | 174      | 141      | 82%         | 75-89%        |                 | 97       | 80       | 82%         | 73-91%        |                 | 77       | 61       | 81%         | 71-91%        |                 |
| \$35,000-<\$50,000             | 240      | 209      | 86%         | 80-92%        |                 | 141      | 124      | 86%         | 79-94%        |                 | 99       | 85       | 85%         | 77-93%        |                 |
| \$50,000-<\$75,000             | 314      | 291      | 94%         | 91-97%        |                 | 175      | 161      | 94%         | 91-97%        |                 | 139      | 130      | 93%         | 88-98%        |                 |
| \$75,000 or greater            | 708      | 666      | 94%         | 92-96%        |                 | 496      | 465      | 94%         | 92-96%        |                 | 212      | 201      | 95%         | 92-98%        |                 |
| Don't know/not sure            | 150      | 110      | 73%         | 65-81%        |                 | 86       | 63       | 74%         | 64-84%        |                 | 64       | 47       | 70%         | 57-83%        |                 |
| Refused                        | 201      | 184      | 93%         | 90-97%        |                 | 131      | 122      | 94%         | 89-98%        |                 | 70       | 62       | 91%         | 85-98%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 6-7. RESPONSES TO THE QUESTION "WHAT WAS THE MOST IMPORTANT REASON YOU HAVE NEVER HAD/NOT HAD A PAP TEST IN THE LAST THREE YEARS?" \***

| <b>Selected Response</b>                            | <b>wt %</b> |
|-----------------------------------------------------|-------------|
| No reason, never thought about it                   | 24%         |
| Doctor didn't order it/didn't say I needed it       | 18%         |
| Put it off/didn't get around to it                  | 11%         |
| Didn't need/ didn't know I needed this type of test | 10%         |
| Haven't had any problems                            | 9%          |
| Don't have a doctor/ Have not visted a doctor       | 7%          |
| Too expensive/no insurance/cost of test             | 5%          |
| Too painful, unpleasant, or embarrassing            | 5%          |
| Did not want to know if I had cancer                | 3%          |
| Other reasons                                       | 4%          |

\*Question asked of 307 female respondents, age 40 years or older (who have not had a hysterectomy), who reported they have never had a Pap test (n=44) or have not had a Pap test in the last three years (n=263). More than one response could be given per

**TABLE 6-8. WOMEN REPORTING THAT A HEALTH CARE PROVIDER RECOMMENDED CERVICAL CANCER SCREENING WITH PAP TEST IN THE PAST YEAR, AMONG THOSE AGE 40 YEARS AND OLDER WHO HAVE NOT HAD A HYSTERECTOMY AND WHO SAW A PROVIDER IN THE PAST YEAR**

| <b>Selected Characteristic</b>         | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
|----------------------------------------|----------|----------|-------------|---------------|-----------------|
| <b>Female Population</b>               | 2116     | 1646     | 79%         | 77-81%        |                 |
| <b>Area of Residence</b>               |          |          |             |               | ^               |
| Urban                                  | 1309     | 1026     | 79%         | 77-82%        |                 |
| Rural                                  | 807      | 620      | 79%         | 76-82%        |                 |
| <b>Age</b>                             |          |          |             |               | **              |
| 40-49 years                            | 687      | 591      | 85%         | 82-88%        |                 |
| 50-64 years                            | 840      | 696      | 84%         | 81-87%        |                 |
| 65-74 years                            | 314      | 219      | 69%         | 63-75%        |                 |
| 75 years and above                     | 275      | 140      | 51%         | 44-58%        |                 |
| <b>Race</b>                            |          |          |             |               | ^               |
| White                                  | 1695     | 1317     | 79%         | 77-82%        |                 |
| African American or Black              | 339      | 266      | 79%         | 74-84%        |                 |
| Other                                  | 82       | 63       | 77%         | 66-87%        |                 |
| <b>Marital Status</b>                  |          |          |             |               | **              |
| Married or partner of unmarried couple | 1212     | 1002     | 83%         | 80-85%        |                 |
| Divorced or separated                  | 382      | 283      | 74%         | 68-79%        |                 |
| Widowed                                | 335      | 216      | 65%         | 59-71%        |                 |
| Never married                          | 179      | 138      | 79%         | 72-86%        |                 |
| <b>Education</b>                       |          |          |             |               | **              |
| Less than high school                  | 134      | 80       | 62%         | 52-71%        |                 |
| High school grad or GED                | 569      | 423      | 75%         | 71-79%        |                 |
| College 1-3 years                      | 522      | 401      | 79%         | 75-83%        |                 |
| College grad                           | 497      | 405      | 82%         | 78-86%        |                 |
| Advanced degree                        | 393      | 337      | 87%         | 83-91%        |                 |
| <b>Employment Status</b>               |          |          |             |               | **              |
| Employed for wages                     | 1000     | 860      | 86%         | 84-89%        |                 |
| Self-employed                          | 175      | 138      | 81%         | 75-88%        |                 |
| Retired                                | 574      | 375      | 66%         | 62-71%        |                 |
| Other                                  | 358      | 267      | 74%         | 69-80%        |                 |
| <b>Household Income</b>                |          |          |             |               | **              |
| <\$25,000                              | 348      | 208      | 60%         | 54-67%        |                 |
| \$25,000-<\$35,000                     | 170      | 124      | 74%         | 65-82%        |                 |
| \$35,000-<\$50,000                     | 235      | 188      | 80%         | 74-86%        |                 |
| \$50,000-<\$75,000                     | 310      | 266      | 86%         | 81-91%        |                 |
| \$75,000 or greater                    | 702      | 603      | 86%         | 83-89%        |                 |
| Don't know/not sure                    | 152      | 100      | 69%         | 60-77%        |                 |
| Refused                                | 199      | 157      | 80%         | 73-86%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

## Chapter 7. Oral Cancer Screening

Oral cancer is cancer that develops in the oral cavity or pharynx. Tobacco use (smoking cigarettes, pipes, or cigars and using smokeless tobacco) and heavy alcohol use are the greatest risk factors for developing oral cancer. In 2002, there were 529 new cases and 158 deaths from oral cancer among Maryland residents.<sup>1</sup> Among the 50 states and the District of Columbia, Maryland ranked 19<sup>th</sup> highest for oral cancer mortality during 2000-2003.<sup>2</sup>

The screening examination for oral cancer consists of visual inspection of the oral cavity and pharynx (mouth and throat) for lesions or discolorations, and palpation (feeling) of oral structures (such as the tongue) for masses. This exam is usually performed by a dentist or dental hygienist during a routine dental examination, or by a physician, nurse practitioner, or physician's assistant during a physical exam.

### Prevalence of Oral Cancer Screening

- Among Marylanders age 40 years and older, just under half (47%) report that they have ever had an oral cancer screening exam (Table 7-1 and Chart 7-1).
- Looking at results for the entire state, significantly lower prevalence of ever having an oral cancer screening exam was seen among:
  - Younger respondents (ages 40 to 49 years compared to those ages 50 to 64 years);
  - Non-White respondents (31% among African Americans and 39% among those of other races);
  - Respondents with a high school education or less (25% to 37% prevalence range); and
  - Persons with an annual household income of less than \$50,000 (28% to 38% prevalence range).
- Eighty-one percent (81%) of those who have ever had oral cancer screening reported that the examination was performed by a dentist or dental specialist, 12% by a dental hygienist, and 7% by a physician. (Data not shown in tables.)

One target of the HP 2010 program is to increase to 20% the proportion of adults age 40 years and older who have had an oral cancer screening exam in the last 12 months.<sup>3</sup>

- Thirty-seven percent (37%) of MCS respondents age 40 years and older reported they had an oral cancer exam within the preceding year (Table 7-2 and Chart 7-1), exceeding the Healthy People 2010 target.

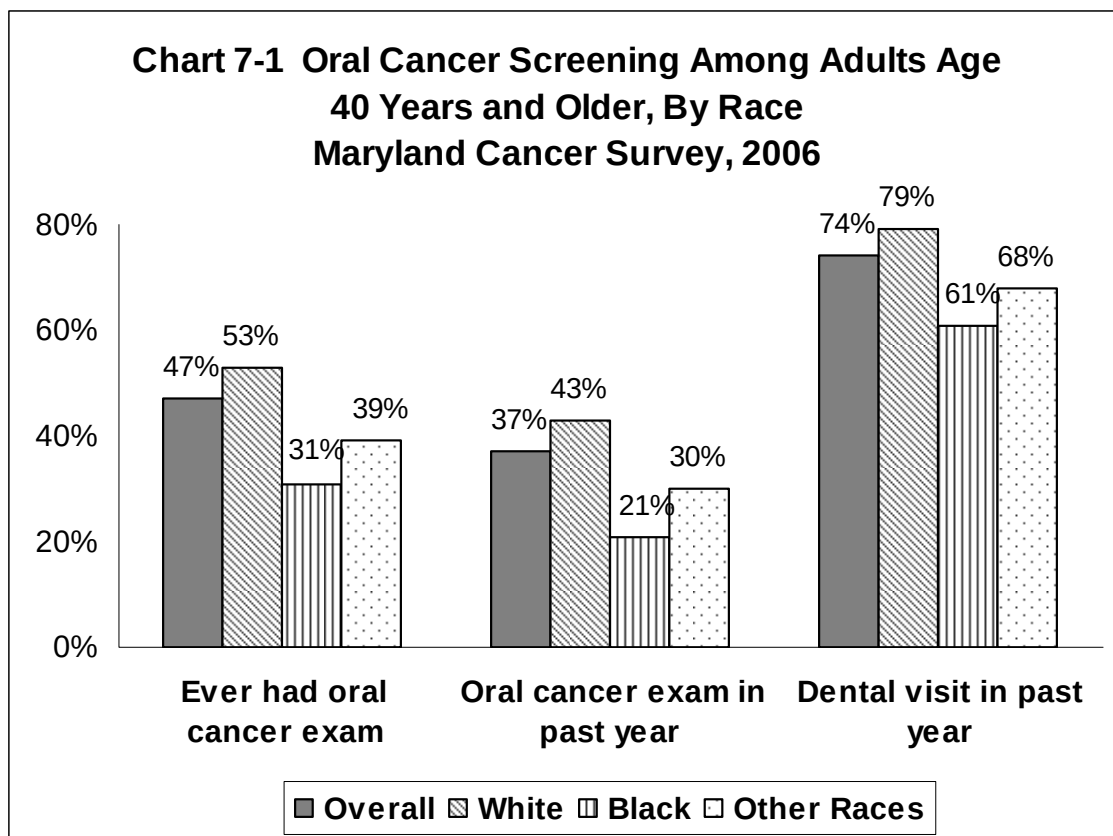
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<sup>1</sup> Maryland Department of Health and Mental Hygiene. Cancer Report 2006. Baltimore, MD; 2006. Available on-line at [http://www.fha.state.md.us/cancer/surveillance/pdf/CRF\\_Can\\_Rpt\\_2006\\_Final\\_PNO\\_v9u.pdf](http://www.fha.state.md.us/cancer/surveillance/pdf/CRF_Can_Rpt_2006_Final_PNO_v9u.pdf). Last accessed July 11, 2007.

<sup>2</sup> Ries LAG et al. (eds). *SEER Cancer Statistics Review, 1975-2003*, National Cancer Institute. Bethesda, MD, [http://seer.cancer.gov/csr/1975\\_2003/](http://seer.cancer.gov/csr/1975_2003/) based on November 2005 SEER data submission, posted to the SEER web site, 2006. Last accessed July 11, 2007.

<sup>3</sup> U.S. Department of Health and Human Services. Healthy People 2010.2<sup>nd</sup> ed. Understanding and Improving Health; Objectives for Improving Health. Volume II, Part B. Oral Health. Washington, DC: U.S. Government Printing Office, November 2000. Available on-line at <http://www.healthypeople.gov/document/HTML/Volume2/21Oral.htm>. Last accessed July 11, 2007.

- Although prevalence of oral cancer screening in the past year exceeded the HP 2010 target for the survey overall, prevalence rates were below the HP 2010 target for the following groups:
  - African American women living in urban areas (19%);
  - Respondents with less than a high school education (15%); and
  - Persons with annual household income less than \$25,000 (18%).
- Differences in the prevalence of having oral cancer screening within the preceding year were seen based on gender, race, level of education, and income level (Table 7-2).
  - Only 34% of males reported oral cancer screening in the past year, compared to 39% of females.
  - Only 21% of African Americans and 30% of persons of other non-White races had been screened for oral cancer in the past year, compared to 43% of Whites.
  - Respondents with less than a high school education (15%) and high school graduates (28%) had significantly lower prevalence of oral cancer screening in the past year than persons with higher education.
  - Oral cancer screening in the past year was less common among persons with an annual household income of less than \$50,000 compared to respondents with higher income levels.



### Access to Dental Care and Oral Cancer Screening

Visits to the dentist for routine care are very important predictors of oral cancer screening, since 93% of Marylanders age 40 years or older who had been screened reported that their oral cancer screening tests were performed by a dentist or dental hygienist. The HP 2010 has set a target to increase to 56% the proportion of children and adults (all ages) who use the oral care system each year.<sup>3</sup>

Among respondents to the MCS (age 40 years and older),

- Seventy-four percent (74%) reported that they had visited a dentist or dental clinic in the last year for any reason (Table 7-3 and Chart 7-1).
- Dental visits in the last year were less frequently reported among older respondents (age 65 years and older); non-White respondents; respondents with a high school education or less; and persons with household income less than \$35,000.

While 74% of Marylanders have visited a dentist in the last year (for any reason) and 81% saw an HCP for a routine check-up in the last year, only about one-third (37%) of MCS respondents reported having an oral cancer screening exam in that time. It is not known whether these dental visits in the last year were for acute care or for preventive care (visits which are more likely to include an oral cancer exam). Alternatively, dental providers may be performing oral cancer screening and not making a point of discussing the exam with their patients.

The percentage of people who ever had an oral cancer screening exam fell dramatically as the number of years since the last dental visit increased. (Data not shown in tables.)

- Fifty-five percent (55%) of people who visited a dentist in the last year reported they have ever had an oral cancer screening exam, compared to 29% who saw a dentist more than 3 but less than 5 years before, and 15% who had a dental visit 5 or more years ago.
- Of the people who visited a dentist in the last year for any reason, only 49% reported they had received an oral cancer exam in the past year.

**TABLE 7-1. PEOPLE REPORTING THEY HAVE EVER HAD AN ORAL CANCER SCREENING EXAM, AMONG THOSE AGE 40 YEARS AND OLDER**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Total Population</b>        | 4902     | 2407     | 47%         | 45-49%        |                 | 2927     | 1461     | 47%         | 45-49%        |                 | 1975     | 946      | 47%         | 44-49%        |                 |
| <b>Gender</b>                  | ^        |          |             |               |                 | ^        |          |             |               |                 | ^        |          |             |               |                 |
| Male                           | 1809     | 864      | 46%         | 43-49%        |                 | 1054     | 515      | 46%         | 42-49%        |                 | 755      | 349      | 45%         | 41-49%        |                 |
| Female                         | 3093     | 1543     | 48%         | 46-50%        |                 | 1873     | 946      | 48%         | 45-51%        |                 | 1220     | 597      | 48%         | 45-52%        |                 |
| <b>Age</b>                     | **       |          |             |               |                 | **       |          |             |               |                 | ^        |          |             |               |                 |
| 40-49 years                    | 1313     | 611      | 44%         | 41-47%        |                 | 799      | 369      | 44%         | 40-48%        |                 | 514      | 242      | 46%         | 41-51%        |                 |
| 50-64 years                    | 1982     | 1023     | 50%         | 48-53%        |                 | 1201     | 625      | 50%         | 47-54%        |                 | 781      | 398      | 50%         | 46-54%        |                 |
| 65 years and above             | 1607     | 773      | 46%         | 43-49%        |                 | 927      | 467      | 47%         | 43-51%        |                 | 680      | 306      | 43%         | 39-47%        |                 |
| <b>Race</b>                    | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| White                          | 3921     | 2093     | 53%         | 51-55%        |                 | 2143     | 1213     | 55%         | 52-57%        |                 | 1778     | 880      | 49%         | 46-52%        |                 |
| African American or Black      | 800      | 246      | 31%         | 27-35%        |                 | 652      | 199      | 31%         | 27-36%        |                 | 148      | 47       | 31%         | 22-41%        |                 |
| Other                          | 181      | 68       | 39%         | 30-47%        |                 | 132      | 49       | 39%         | 30-48%        |                 | 49       | 19       | 35%         | 19-50%        |                 |
| <b>Gender and Race</b>         | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| White male                     | 1509     | 753      | 49%         | 46-52%        |                 | 818      | 427      | 50%         | 46-54%        |                 | 691      | 326      | 47%         | 43-51%        |                 |
| African American male          | 232      | 82       | 36%         | 28-43%        |                 | 191      | 69       | 36%         | 28-44%        |                 | 41       | 13       | 30%         | 14-46%        |                 |
| Other male                     | 68       | 29       | 44%         | 29-59%        |                 | 45       | 19       | 45%         | 29-61%        |                 | 23       | 10       | 36%         | 12-59%        |                 |
| White female                   | 2412     | 1340     | 57%         | 55-59%        |                 | 1325     | 786      | 59%         | 56-62%        |                 | 1087     | 554      | 51%         | 48-54%        |                 |
| African American female        | 568      | 164      | 28%         | 23-32%        |                 | 461      | 130      | 27%         | 23-32%        |                 | 107      | 34       | 32%         | 22-43%        |                 |
| Other female                   | 113      | 39       | 34%         | 25-44%        |                 | 87       | 30       | 35%         | 24-45%        |                 | 26       | 9        | 33%         | 13-54%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value  $>$  0.05 - 0.1

^ p-value  $>$  0.1

Maryland Cancer Survey, 2006

**TABLE 7-1. PEOPLE REPORTING THEY HAVE EVER HAD AN ORAL CANCER SCREENING EXAM, AMONG THOSE AGE 40 YEARS AND OLDER**

|                                        | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|----------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Marital Status</b>                  | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Married or partner of unmarried couple | 2916     | 1541     | 50%         | 48-53%        |                 | 1682     | 903      | 51%         | 48-53%        |                 | 1234     | 638      | 50%         | 47-53%        |                 |
| Divorced or separated                  | 848      | 371      | 40%         | 35-44%        |                 | 527      | 226      | 39%         | 34-44%        |                 | 321      | 145      | 41%         | 35-48%        |                 |
| Widowed                                | 731      | 329      | 44%         | 39-48%        |                 | 417      | 208      | 46%         | 40-51%        |                 | 314      | 121      | 36%         | 31-42%        |                 |
| Never married                          | 390      | 161      | 35%         | 30-41%        |                 | 285      | 119      | 35%         | 29-42%        |                 | 105      | 42       | 34%         | 23-45%        |                 |
| <b>Education</b>                       | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Less than high school                  | 398      | 106      | 25%         | 20-31%        |                 | 200      | 58       | 27%         | 19-34%        |                 | 198      | 48       | 22%         | 15-28%        |                 |
| High school grad or GED                | 1355     | 529      | 37%         | 34-41%        |                 | 657      | 259      | 37%         | 33-41%        |                 | 698      | 270      | 39%         | 34-43%        |                 |
| College 1-3 years                      | 1180     | 605      | 48%         | 44-52%        |                 | 683      | 336      | 47%         | 42-51%        |                 | 497      | 269      | 52%         | 47-58%        |                 |
| College grad                           | 1051     | 597      | 52%         | 48-56%        |                 | 717      | 395      | 51%         | 47-55%        |                 | 334      | 202      | 59%         | 53-65%        |                 |
| Advanced degree                        | 907      | 565      | 61%         | 57-65%        |                 | 663      | 409      | 61%         | 56-65%        |                 | 244      | 156      | 63%         | 56-70%        |                 |
| <b>Employment Status</b>               | **       |          |             |               |                 | *        |          |             |               |                 | **       |          |             |               |                 |
| Employed for wages                     | 2188     | 1118     | 49%         | 46-51%        |                 | 1347     | 693      | 49%         | 46-52%        |                 | 841      | 425      | 48%         | 45-52%        |                 |
| Self-employed                          | 422      | 212      | 48%         | 42-53%        |                 | 261      | 133      | 47%         | 40-54%        |                 | 161      | 79       | 49%         | 40-57%        |                 |
| Retired                                | 1638     | 815      | 48%         | 45-51%        |                 | 932      | 476      | 47%         | 44-51%        |                 | 706      | 339      | 48%         | 44-52%        |                 |
| Other                                  | 640      | 256      | 40%         | 34-45%        |                 | 376      | 154      | 40%         | 34-47%        |                 | 264      | 102      | 37%         | 30-43%        |                 |
| <b>Household Income</b>                | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| <\$25,000                              | 833      | 255      | 28%         | 24-32%        |                 | 439      | 135      | 28%         | 23-33%        |                 | 394      | 120      | 28%         | 23-33%        |                 |
| \$25,000-<\$35,000                     | 431      | 183      | 35%         | 29-41%        |                 | 240      | 104      | 35%         | 28-42%        |                 | 191      | 79       | 35%         | 28-43%        |                 |
| \$35,000-<\$50,000                     | 600      | 261      | 38%         | 34-43%        |                 | 343      | 135      | 35%         | 29-41%        |                 | 257      | 126      | 49%         | 42-56%        |                 |
| \$50,000-<\$75,000                     | 710      | 381      | 50%         | 46-55%        |                 | 402      | 210      | 49%         | 44-55%        |                 | 308      | 171      | 52%         | 45-59%        |                 |
| \$75,000 or greater                    | 1594     | 961      | 57%         | 54-60%        |                 | 1063     | 651      | 57%         | 54-61%        |                 | 531      | 310      | 57%         | 53-62%        |                 |
| Don't know/not sure                    | 298      | 120      | 39%         | 33-46%        |                 | 169      | 71       | 40%         | 32-49%        |                 | 129      | 49       | 36%         | 27-46%        |                 |
| Refused                                | 436      | 246      | 56%         | 49-62%        |                 | 271      | 155      | 57%         | 49-64%        |                 | 165      | 91       | 51%         | 42-60%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1



**TABLE 7-2. PEOPLE REPORTING THEY HAVE HAD AN ORAL CANCER EXAM IN THE PAST YEAR, AMONG THOSE 40 YEARS AND OLDER**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Total Population</b>        | 4902     | 1902     | 37%         | 35-38%        |                 | 2927     | 1151     | 37%         | 35-39%        |                 | 1975     | 751      | 37%         | 34-39%        |                 |
| <b>Gender</b>                  | **       |          |             |               |                 | *        |          |             |               |                 | **       |          |             |               |                 |
| Male                           | 1809     | 667      | 34%         | 32-37%        |                 | 1054     | 399      | 35%         | 31-38%        |                 | 755      | 268      | 34%         | 30-38%        |                 |
| Female                         | 3093     | 1235     | 39%         | 37-41%        |                 | 1873     | 752      | 39%         | 36-41%        |                 | 1220     | 483      | 39%         | 36-42%        |                 |
| <b>Age</b>                     | ^        |          |             |               |                 | ^        |          |             |               |                 | ^        |          |             |               |                 |
| 40-49 years                    | 1313     | 490      | 35%         | 32-38%        |                 | 799      | 292      | 34%         | 30-38%        |                 | 514      | 198      | 36%         | 32-41%        |                 |
| 50-64 years                    | 1982     | 796      | 39%         | 36-41%        |                 | 1201     | 483      | 38%         | 35-41%        |                 | 781      | 313      | 39%         | 35-43%        |                 |
| 65 years and above             | 1607     | 616      | 37%         | 34-40%        |                 | 927      | 376      | 38%         | 35-42%        |                 | 680      | 240      | 34%         | 30-38%        |                 |
| <b>Race</b>                    | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| White                          | 3921     | 1686     | 43%         | 41-45%        |                 | 2143     | 986      | 44%         | 42-47%        |                 | 1778     | 700      | 38%         | 36-41%        |                 |
| African American or Black      | 800      | 165      | 21%         | 18-25%        |                 | 652      | 129      | 21%         | 17-25%        |                 | 148      | 36       | 24%         | 15-32%        |                 |
| Other                          | 181      | 51       | 30%         | 21-38%        |                 | 132      | 36       | 30%         | 21-39%        |                 | 49       | 15       | 27%         | 12-41%        |                 |
| <b>Gender and Race</b>         | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| White male                     | 1509     | 592      | 38%         | 35-41%        |                 | 818      | 342      | 39%         | 36-43%        |                 | 691      | 250      | 35%         | 31-39%        |                 |
| African American male          | 232      | 55       | 24%         | 17-31%        |                 | 191      | 45       | 24%         | 17-32%        |                 | 41       | 10       | 22%         | 8-37%         |                 |
| Other male                     | 68       | 20       | 31%         | 16-45%        |                 | 45       | 12       | 31%         | 15-47%        |                 | 23       | 8        | 31%         | 8-55%         |                 |
| White female                   | 2412     | 1094     | 47%         | 45-49%        |                 | 1325     | 644      | 49%         | 46-52%        |                 | 1087     | 450      | 41%         | 38-45%        |                 |
| African American female        | 568      | 110      | 19%         | 15-23%        |                 | 461      | 84       | 19%         | 15-23%        |                 | 107      | 26       | 25%         | 15-35%        |                 |
| Other female                   | 113      | 31       | 29%         | 19-39%        |                 | 87       | 24       | 29%         | 19-40%        |                 | 26       | 7        | 23%         | 6-41%         |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 7-2. PEOPLE REPORTING THEY HAVE HAD AN ORAL CANCER EXAM IN THE PAST YEAR, AMONG THOSE 40 YEARS AND OLDER**

|                                        | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|----------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Marital Status</b>                  | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Married or partner of unmarried couple | 2916     | 1259     | 41%         | 39-43%        |                 | 1682     | 742      | 41%         | 39-44%        |                 | 1234     | 517      | 40%         | 37-43%        |                 |
| Divorced or separated                  | 848      | 281      | 29%         | 26-33%        |                 | 527      | 173      | 29%         | 25-33%        |                 | 321      | 108      | 30%         | 24-36%        |                 |
| Widowed                                | 731      | 248      | 31%         | 27-35%        |                 | 417      | 154      | 32%         | 27-37%        |                 | 314      | 94       | 28%         | 23-33%        |                 |
| Never married                          | 390      | 110      | 22%         | 17-26%        |                 | 285      | 78       | 21%         | 16-26%        |                 | 105      | 32       | 26%         | 16-35%        |                 |
| <b>Education</b>                       | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Less than high school                  | 398      | 69       | 15%         | 11-19%        |                 | 200      | 36       | 14%         | 9-20%         |                 | 198      | 33       | 16%         | 10-22%        |                 |
| High school grad or GED                | 1355     | 396      | 28%         | 25-31%        |                 | 657      | 198      | 29%         | 25-32%        |                 | 698      | 198      | 28%         | 24-31%        |                 |
| College 1-3 years                      | 1180     | 464      | 36%         | 32-40%        |                 | 683      | 252      | 35%         | 30-39%        |                 | 497      | 212      | 41%         | 36-46%        |                 |
| College grad                           | 1051     | 506      | 44%         | 40-48%        |                 | 717      | 331      | 43%         | 38-47%        |                 | 334      | 175      | 51%         | 45-57%        |                 |
| Advanced degree                        | 907      | 465      | 50%         | 46-54%        |                 | 663      | 332      | 49%         | 45-54%        |                 | 244      | 133      | 52%         | 45-59%        |                 |
| <b>Employment Status</b>               | **       |          |             |               |                 | ^        |          |             |               |                 | **       |          |             |               |                 |
| Employed for wages                     | 2188     | 898      | 38%         | 36-41%        |                 | 1347     | 550      | 38%         | 35-41%        |                 | 841      | 348      | 38%         | 35-42%        |                 |
| Self-employed                          | 422      | 167      | 37%         | 31-43%        |                 | 261      | 104      | 37%         | 30-43%        |                 | 161      | 63       | 38%         | 30-47%        |                 |
| Retired                                | 1638     | 646      | 38%         | 35-41%        |                 | 932      | 373      | 37%         | 34-41%        |                 | 706      | 273      | 39%         | 35-43%        |                 |
| Other                                  | 640      | 186      | 30%         | 25-36%        |                 | 376      | 120      | 32%         | 26-38%        |                 | 264      | 66       | 24%         | 18-30%        |                 |
| <b>Household Income</b>                | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| <\$25,000                              | 833      | 163      | 18%         | 15-21%        |                 | 439      | 86       | 18%         | 14-22%        |                 | 394      | 77       | 18%         | 13-22%        |                 |
| \$25,000-<\$35,000                     | 431      | 138      | 25%         | 20-30%        |                 | 240      | 77       | 24%         | 18-30%        |                 | 191      | 61       | 26%         | 20-32%        |                 |
| \$35,000-<\$50,000                     | 600      | 206      | 30%         | 25-34%        |                 | 343      | 109      | 28%         | 23-34%        |                 | 257      | 97       | 34%         | 27-40%        |                 |
| \$50,000-<\$75,000                     | 710      | 306      | 40%         | 36-44%        |                 | 402      | 165      | 39%         | 34-45%        |                 | 308      | 141      | 42%         | 36-49%        |                 |
| \$75,000 or greater                    | 1594     | 800      | 47%         | 44-50%        |                 | 1063     | 537      | 47%         | 43-50%        |                 | 531      | 263      | 48%         | 43-53%        |                 |
| Don't know/not sure                    | 298      | 91       | 30%         | 24-36%        |                 | 169      | 55       | 31%         | 23-38%        |                 | 129      | 36       | 29%         | 19-38%        |                 |
| Refused                                | 436      | 198      | 44%         | 37-50%        |                 | 271      | 122      | 44%         | 36-52%        |                 | 165      | 76       | 42%         | 34-51%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 7-3. PEOPLE REPORTING DENTAL VISITS DURING THE PAST YEAR, AMONG THOSE 40 YEARS AND OLDER**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Total Population</b>        | 5104     | 3724     | 74%         | 72-75%        |                 | 3048     | 2302     | 75%         | 73-77%        |                 | 2056     | 1422     | 69%         | 66-71%        |                 |
| <b>Gender</b>                  | ^        |          |             |               |                 | ^        |          |             |               |                 | **       |          |             |               |                 |
| Male                           | 1896     | 1372     | 73%         | 70-75%        |                 | 1100     | 835      | 75%         | 72-78%        |                 | 796      | 537      | 66%         | 62-70%        |                 |
| Female                         | 3208     | 2352     | 75%         | 73-76%        |                 | 1948     | 1467     | 76%         | 74-78%        |                 | 1260     | 885      | 71%         | 68-74%        |                 |
| <b>Age</b>                     | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| 40-49 years                    | 1369     | 1044     | 77%         | 74-79%        |                 | 836      | 658      | 78%         | 75-81%        |                 | 533      | 386      | 71%         | 66-75%        |                 |
| 50-64 years                    | 2064     | 1538     | 74%         | 72-77%        |                 | 1247     | 942      | 75%         | 72-78%        |                 | 817      | 596      | 72%         | 68-76%        |                 |
| 65 years and above             | 1671     | 1142     | 69%         | 66-72%        |                 | 965      | 702      | 71%         | 68-75%        |                 | 706      | 440      | 61%         | 57-65%        |                 |
| <b>Race</b>                    | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| White                          | 4092     | 3126     | 79%         | 77-80%        |                 | 2241     | 1810     | 82%         | 80-83%        |                 | 1851     | 1316     | 71%         | 69-74%        |                 |
| African American or Black      | 826      | 476      | 61%         | 57-65%        |                 | 670      | 398      | 62%         | 58-67%        |                 | 156      | 78       | 50%         | 40-60%        |                 |
| Other                          | 186      | 122      | 68%         | 59-76%        |                 | 137      | 94       | 68%         | 60-77%        |                 | 49       | 28       | 58%         | 41-75%        |                 |
| <b>Gender and Race</b>         | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| White male                     | 1585     | 1194     | 77%         | 75-80%        |                 | 855      | 684      | 80%         | 77-83%        |                 | 730      | 510      | 70%         | 66-74%        |                 |
| African American male          | 239      | 138      | 61%         | 54-69%        |                 | 196      | 120      | 64%         | 56-72%        |                 | 43       | 18       | 40%         | 23-57%        |                 |
| Other male                     | 72       | 40       | 64%         | 50-77%        |                 | 49       | 31       | 66%         | 51-80%        |                 | 23       | 9        | 42%         | 17-67%        |                 |
| White female                   | 2507     | 1932     | 80%         | 79-82%        |                 | 1386     | 1126     | 83%         | 81-85%        |                 | 1121     | 806      | 73%         | 70-76%        |                 |
| African American female        | 587      | 338      | 61%         | 56-65%        |                 | 474      | 278      | 61%         | 56-66%        |                 | 113      | 60       | 59%         | 48-69%        |                 |
| Other female                   | 114      | 82       | 71%         | 61-81%        |                 | 88       | 63       | 71%         | 60-81%        |                 | 26       | 19       | 71%         | 48-94%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value  $>$  0.05 - 0.1

^ p-value  $>$  0.1

**TABLE 7-3. PEOPLE REPORTING DENTAL VISITS DURING THE PAST YEAR, AMONG THOSE 40 YEARS AND OLDER**

|                                           | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|-------------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>            | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Marital Status</b>                     | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Married or partner of<br>unmarried couple | 3057     | 2417     | 79%         | 77-81%        |                 | 1766     | 1443     | 81%         | 78-83%        |                 | 1291     | 974      | 74%         | 71-77%        |                 |
| Divorced or separated                     | 878      | 570      | 64%         | 60-69%        |                 | 544      | 359      | 66%         | 61-70%        |                 | 334      | 211      | 60%         | 54-67%        |                 |
| Widowed                                   | 755      | 471      | 60%         | 55-64%        |                 | 432      | 290      | 62%         | 56-67%        |                 | 323      | 181      | 53%         | 47-59%        |                 |
| Never married                             | 399      | 254      | 61%         | 55-68%        |                 | 292      | 198      | 64%         | 57-71%        |                 | 107      | 56       | 44%         | 33-56%        |                 |
| <b>Education</b>                          | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Less than high school                     | 405      | 159      | 41%         | 34-47%        |                 | 206      | 90       | 44%         | 35-52%        |                 | 199      | 69       | 32%         | 25-40%        |                 |
| High school grad or GED                   | 1399     | 908      | 66%         | 63-69%        |                 | 677      | 446      | 68%         | 64-72%        |                 | 722      | 462      | 63%         | 59-67%        |                 |
| College 1-3 years                         | 1231     | 890      | 73%         | 70-77%        |                 | 708      | 516      | 74%         | 70-78%        |                 | 523      | 374      | 72%         | 67-76%        |                 |
| College grad                              | 1106     | 922      | 81%         | 78-85%        |                 | 750      | 626      | 81%         | 77-85%        |                 | 356      | 296      | 84%         | 79-88%        |                 |
| Advanced degree                           | 954      | 837      | 88%         | 85-90%        |                 | 701      | 619      | 88%         | 85-91%        |                 | 253      | 218      | 86%         | 82-91%        |                 |
| <b>Employment Status</b>                  | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Employed for wages                        | 2286     | 1785     | 78%         | 76-80%        |                 | 1415     | 1122     | 79%         | 77-82%        |                 | 871      | 663      | 75%         | 71-78%        |                 |
| Self-employed                             | 438      | 338      | 77%         | 72-82%        |                 | 272      | 215      | 77%         | 71-83%        |                 | 166      | 123      | 76%         | 69-83%        |                 |
| Retired                                   | 1707     | 1204     | 72%         | 69-74%        |                 | 965      | 716      | 74%         | 71-77%        |                 | 742      | 488      | 65%         | 61-69%        |                 |
| Other                                     | 660      | 386      | 60%         | 55-65%        |                 | 386      | 241      | 63%         | 57-69%        |                 | 274      | 145      | 51%         | 44-58%        |                 |
| <b>Household Income</b>                   | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| <\$25,000                                 | 854      | 402      | 48%         | 43-52%        |                 | 455      | 225      | 49%         | 44-55%        |                 | 399      | 177      | 43%         | 37-49%        |                 |
| \$25,000-<\$35,000                        | 450      | 289      | 62%         | 56-68%        |                 | 249      | 166      | 64%         | 57-72%        |                 | 201      | 123      | 55%         | 47-63%        |                 |
| \$35,000-<\$50,000                        | 617      | 456      | 73%         | 69-78%        |                 | 354      | 265      | 75%         | 69-80%        |                 | 263      | 191      | 70%         | 63-76%        |                 |
| \$50,000-<\$75,000                        | 745      | 592      | 79%         | 75-83%        |                 | 421      | 338      | 79%         | 74-84%        |                 | 324      | 254      | 78%         | 73-84%        |                 |
| \$75,000 or greater                       | 1679     | 1455     | 86%         | 84-88%        |                 | 1118     | 983      | 87%         | 84-89%        |                 | 561      | 472      | 83%         | 80-87%        |                 |
| Don't know/not sure                       | 311      | 184      | 57%         | 50-64%        |                 | 170      | 103      | 59%         | 50-67%        |                 | 141      | 81       | 52%         | 42-62%        |                 |
| Refused                                   | 448      | 346      | 77%         | 71-82%        |                 | 281      | 222      | 79%         | 73-85%        |                 | 167      | 124      | 69%         | 58-79%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

## Chapter 8. Access to Health Care and Cancer Screening

### Health Care Coverage

Increasing the proportion of people under age 65 who have health care insurance is one of the goals of HP 2010.<sup>1</sup> The HP 2010 target is to increase the proportion of persons with health insurance coverage from a national baseline of 83% (National Health Interview Survey, 1997) to 100%.

Among MCS 2006 respondents age 40 years and older:

- Ninety-four percent (94%) reported they have some form of health insurance (Table 8-1). Based on these results, Maryland has not yet attained the HP 2010 target of 100% for health insurance coverage.

Statistically significant differences in health insurance status were observed by several demographic characteristics. The proportion of respondents with health insurance was statistically significantly lower among:

- Younger respondents (age 40-49 years) compared to those in the older age groups;
- Non-White respondents;
- Those who were never married, or were divorced or separated compared to married or widowed;
- Respondents with less than a high school education;
- Persons who were self-employed or had employment status of “other”; and
- Those with an annual household income less than \$35,000 per year.

People who currently have health insurance were asked whether there was a time in the last 12 months when they did not have insurance (Table 8-2).

- Three percent (3%) of those who reported they currently had insurance reported that they had been without health insurance sometime during the past year. (Because survey responses in some cells are very small, these estimates may be unstable.)

As shown in Table 8-2, respondents who were without health insurance sometime in the last year were more likely to be:

- Under the age of 65 years;
- Of race other than White or African American;
- Never married or divorced or separated;
- Self-employed or to have an employment status of “other”; or
- In lower income group (annual household income of less than \$25,000).

People who do not currently have any kind of health care coverage (6% of the survey population) were asked how long they have been without coverage. (Data not shown in tables.)

- Of those without insurance at the time of the survey, 20% reported losing their insurance in the last year, while 67% reported having been without insurance for one

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<sup>1</sup> U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. Volume I. Access to Quality Health Services. Washington, DC: U.S. Government Printing Office, November 2000. Available at <http://www.healthypeople.gov/document/HTML/Volume1/01Access.htm>. Last accessed July 11, 2007.

year or longer. Thirteen percent (13%) said they never had health insurance coverage.

- More than one-fourth (27%) of rural respondents currently without insurance reported never having coverage, compared to 10% of urban residents without insurance.

The Maryland Health Insurance Plan (MHIP) is a state administered health insurance program for Maryland residents who do not have access to health insurance. Participants in the MCS 2006 were asked whether they had ever heard of the MHIP (Table 8-2).

- Less than one-third (31%) of all respondents were familiar with the MHIP.
- In comparison with other respondents, a lower proportion of men (27%) and self-employed respondents (26%) said they have heard of the MHIP.

### Health Care Access

Access to health care (primarily health insurance coverage and having a usual source of care) is a strong predictor of recent cancer screening.<sup>2</sup> Across all racial and ethnic groups, those who lack health insurance or have inadequate access to care typically have higher cancer incidence and mortality rates, and lower rates of cancer survival.<sup>3</sup>

MCS 2006 respondents were asked how long it had been since they last visited a doctor for a routine checkup. (Data not shown in tables.)

- Eighty-one percent (81%) of respondents age 40 years and older said they had a routine checkup in the last year.
- A significantly higher proportion of African American men (86%) reported a routine checkup within the past year, compared with White men (75%).
- Eighty-eight percent (88%) of all men and 92% of all women reported having a routine checkup within the past 2 years.
- Less than 1% said they have never visited a doctor for a routine checkup.

When asked whether they have one person they think of as their personal doctor or primary HCP, MCS participants responded as follows (Table 8-3):

- Ninety-three percent (93%) said they have at least one person they think of as their HCP.
- This proportion was statistically significantly lower among respondents with the following characteristics:
  - Male gender
  - Younger age (ages 40 to 49 years)
  - Never married or divorced or separated
  - Less than a high school education
  - Self-employed or “other” employment status, and
  - Annual household income of less than \$25,000.

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<sup>2</sup> Smith RA, Cokkinides V, Hammon JE. American Cancer Society Guidelines for Early Detection of Cancer, 2006. CA Cancer J Clin 2006; 56:11-25.

<sup>3</sup> Institute of Medicine. The Unequal Burden of Cancer: An Assessment of NIH Research and Programs for Ethnic Minorities and the Medically Underserved. Washington, D.C., National Academy Press; 1999.

When asked where they go most often when sick or in need of advice about their health, 84% of respondents said they go to a doctor's office or health maintenance organization (HMO), 7% go to a clinic or health center, 3% go to a hospital emergency room, and 2% go to a hospital outpatient department (Table 8-4).

### Health Care Access and Cancer Screening

Research has found that the people who are uninsured or underinsured are less likely to be screened for cancer.<sup>4, 5</sup> In the MCS 2006, we sought to determine whether having health insurance was associated with higher prevalence of cancer screening among Maryland residents (Table 8-5).

- For every type of cancer screening except the Pap test, the prevalence of cancer screening was significantly higher among respondents with health insurance than among those without insurance.
- Differences in screening prevalence by health insurance status were greatest for ever having an FOBT, sigmoidoscopy or colonoscopy, PSA test, and oral cancer screening.
- The prevalence of ever having a mammogram was statistically significantly lower among women who were without health insurance for part of the past year compared to those who had insurance coverage during the entire year.
- Among respondents who did not have health insurance at the time of the survey, prevalence of ever having lower GI endoscopy (sigmoidoscopy or colonoscopy) was significantly lower among those who were without insurance for a year or more (29%) and among those who never had health insurance (8%), compared to respondents who have been without insurance for less than one year (52%).
- The prevalence of cancer screening generally declined with increasing length of time since the last routine medical checkup.
- For every type of screening test except Pap test, the prevalence of ever being screened was significantly lower among respondents who did not have a primary HCP, compared to those who did.

The MCS 2006 also examined the timeliness of cancer screening tests, relative to various measures of health care access. In this analysis, up-to-date screening is based on frequencies recommended by the ACS or those incorporated in HP 2010 objectives. As shown in Table 8-6, the prevalence of up-to-date cancer screening among MCS 2006 respondents varied significantly with some measures of health care access.

- For every type of cancer screening, the prevalence of being up-to-date was significantly higher among respondents who had health insurance compared to those who did not.
- Women who were without health insurance some time in the past year had a significantly lower prevalence of being up-to-date with Pap testing and mammography, compared to women who had continuous health insurance coverage throughout the year.

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<sup>4</sup> Swan, J et. al. Progress in cancer screening practices in the United States: Results from the 2000 National Health Interview Survey. *Cancer*. 2003 Mar 15;97(6):1528-40.

<sup>5</sup> Ross JS, Bradley EH, Busch SH. Use of health care services by lower-income and higher-income uninsured adults. *JAMA*. 2006; 295(17) :2027-36.

- Among respondents who did not have health insurance at the time of the survey, women who had been without coverage for a year or more had a significantly lower prevalence of being up-to-date with breast and cervical cancer screening than women who lost their insurance only within the past year.
- For all cancer screening types, the proportion of people who were up-to-date decreased significantly with increasing length of time since the last routine medical checkup.
- For every type of screening test, the prevalence of being up-to-date with screening was significantly lower among respondents who did not have a primary HCP, compared to those who did.



**TABLE 8-1. PEOPLE REPORTING TO HAVE HEALTH INSURANCE, AMONG THOSE AGE 40 YEARS AND OLDER**

|                                | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|--------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| Total Population               | 5144     | 4858     | 94%         | 93-95%        |                 | 3067     | 2908     | 94%         | 93-95%        |                 | 2077     | 1950     | 94%         | 92-95%        |                 |
| <b>Gender</b>                  | ^        |          |             |               |                 | ^        |          |             |               |                 | ^        |          |             |               |                 |
| Male                           | 1914     | 1802     | 93%         | 92-95%        |                 | 1108     | 1045     | 93%         | 91-95%        |                 | 806      | 757      | 94%         | 92-96%        |                 |
| Female                         | 3230     | 3056     | 94%         | 93-95%        |                 | 1959     | 1863     | 95%         | 94-96%        |                 | 1271     | 1193     | 93%         | 92-95%        |                 |
| <b>Age</b>                     | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| 40-49 years                    | 1371     | 1253     | 91%         | 89-93%        |                 | 839      | 762      | 90%         | 88-93%        |                 | 532      | 491      | 92%         | 90-95%        |                 |
| 50-64 years                    | 2076     | 1923     | 94%         | 92-95%        |                 | 1251     | 1176     | 94%         | 93-96%        |                 | 825      | 747      | 91%         | 88-93%        |                 |
| 65 years and above             | 1697     | 1682     | 99%         | 99-100%       |                 | 977      | 970      | 99%         | 98-100%       |                 | 720      | 712      | 99%         | 98-100%       |                 |
| <b>Race</b>                    | **       |          |             |               |                 | **       |          |             |               |                 | *        |          |             |               |                 |
| White                          | 4124     | 3945     | 95%         | 94-96%        |                 | 2254     | 2180     | 96%         | 95-97%        |                 | 1870     | 1765     | 94%         | 92-95%        |                 |
| African American or Black      | 830      | 751      | 91%         | 89-94%        |                 | 673      | 608      | 91%         | 89-93%        |                 | 157      | 143      | 94%         | 90-97%        |                 |
| Other                          | 190      | 162      | 86%         | 81-92%        |                 | 140      | 120      | 87%         | 81-93%        |                 | 50       | 42       | 82%         | 68-96%        |                 |
| <b>Gender and Race</b>         | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| White male                     | 1601     | 1517     | 94%         | 93-96%        |                 | 861      | 823      | 95%         | 93-97%        |                 | 740      | 694      | 93%         | 91-95%        |                 |
| African American male          | 241      | 221      | 92%         | 88-96%        |                 | 198      | 179      | 91%         | 87-95%        |                 | 43       | 42       | 98%         | 93-100%       |                 |
| Other male                     | 72       | 64       | 86%         | 76-97%        |                 | 49       | 43       | 86%         | 74-97%        |                 | 23       | 21       | 92%         | 80-100%       |                 |
| White female                   | 2523     | 2428     | 96%         | 95-97%        |                 | 1393     | 1357     | 97%         | 96-98%        |                 | 1130     | 1071     | 94%         | 93-96%        |                 |
| African American female        | 589      | 530      | 91%         | 88-93%        |                 | 475      | 429      | 91%         | 88-94%        |                 | 114      | 101      | 90%         | 85-96%        |                 |
| Other female                   | 118      | 98       | 87%         | 80-93%        |                 | 91       | 77       | 88%         | 81-94%        |                 | 27       | 21       | 74%         | 51-96%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value  $>$  0.05 - 0.1

^ p-value  $>$  0.1

**TABLE 8-1. PEOPLE REPORTING TO HAVE HEALTH INSURANCE, AMONG THOSE AGE 40 YEARS AND OLDER**

|                                        | TOTAL ~  |          |             |               |                 | URBAN ~  |          |             |               |                 | RURAL ~  |          |             |               |                 |
|----------------------------------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|----------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Marital Status</b>                  | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Married or partner of unmarried couple | 3070     | 2967     | 96%         | 96-97%        |                 | 1771     | 1718     | 97%         | 96-98%        |                 | 1299     | 1249     | 96%         | 95-97%        |                 |
| Divorced or separated                  | 884      | 780      | 87%         | 84-90%        |                 | 548      | 492      | 88%         | 85-91%        |                 | 336      | 288      | 83%         | 77-88%        |                 |
| Widowed                                | 770      | 745      | 95%         | 93-98%        |                 | 438      | 425      | 95%         | 91-98%        |                 | 332      | 320      | 97%         | 95-99%        |                 |
| Never married                          | 403      | 353      | 84%         | 79-89%        |                 | 294      | 260      | 85%         | 80-90%        |                 | 109      | 93       | 78%         | 67-89%        |                 |
| <b>Education</b>                       | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Less than high school                  | 410      | 343      | 82%         | 77-87%        |                 | 208      | 171      | 82%         | 75-88%        |                 | 202      | 172      | 82%         | 75-89%        |                 |
| High school grad or GED                | 1420     | 1321     | 92%         | 90-94%        |                 | 686      | 642      | 92%         | 90-95%        |                 | 734      | 679      | 92%         | 89-94%        |                 |
| College 1-3 years                      | 1239     | 1178     | 94%         | 93-96%        |                 | 711      | 676      | 94%         | 92-96%        |                 | 528      | 502      | 95%         | 94-97%        |                 |
| College grad                           | 1109     | 1068     | 96%         | 95-97%        |                 | 753      | 725      | 96%         | 94-98%        |                 | 356      | 343      | 97%         | 95-99%        |                 |
| Advanced degree                        | 955      | 938      | 98%         | 96-99%        |                 | 702      | 688      | 98%         | 96-99%        |                 | 253      | 250      | 99%         | 98-100%       |                 |
| <b>Employment Status</b>               | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| Employed for wages                     | 2295     | 2200     | 96%         | 94-97%        |                 | 1417     | 1362     | 96%         | 94-97%        |                 | 878      | 838      | 96%         | 94-97%        |                 |
| Self-employed                          | 438      | 378      | 87%         | 83-91%        |                 | 272      | 240      | 87%         | 83-92%        |                 | 166      | 138      | 84%         | 78-90%        |                 |
| Retired                                | 1729     | 1706     | 99%         | 99-100%       |                 | 977      | 970      | 99%         | 99-100%       |                 | 752      | 736      | 98%         | 97-99%        |                 |
| Other                                  | 668      | 563      | 83%         | 79-87%        |                 | 390      | 327      | 83%         | 78-88%        |                 | 278      | 236      | 83%         | 77-88%        |                 |
| <b>Household Income</b>                | **       |          |             |               |                 | **       |          |             |               |                 | **       |          |             |               |                 |
| <\$25,000                              | 867      | 727      | 81%         | 78-85%        |                 | 460      | 381      | 81%         | 76-85%        |                 | 407      | 346      | 83%         | 78-88%        |                 |
| \$25,000-<\$35,000                     | 453      | 417      | 88%         | 84-93%        |                 | 251      | 230      | 87%         | 82-93%        |                 | 202      | 187      | 92%         | 87-96%        |                 |
| \$35,000-<\$50,000                     | 621      | 599      | 95%         | 93-97%        |                 | 355      | 343      | 95%         | 92-98%        |                 | 266      | 256      | 95%         | 91-99%        |                 |
| \$50,000-<\$75,000                     | 748      | 716      | 96%         | 94-97%        |                 | 423      | 406      | 95%         | 93-98%        |                 | 325      | 310      | 96%         | 93-98%        |                 |
| \$75,000 or greater                    | 1682     | 1668     | 99%         | 98-100%       |                 | 1119     | 1108     | 99%         | 98-99%        |                 | 563      | 560      | 100%        | 99-100%       |                 |
| Don't know/not sure                    | 320      | 288      | 88%         | 84-93%        |                 | 175      | 162      | 92%         | 86-97%        |                 | 145      | 126      | 80%         | 70-89%        |                 |
| Refused                                | 453      | 443      | 98%         | 96-99%        |                 | 284      | 278      | 98%         | 96-100%       |                 | 169      | 165      | 98%         | 96-100%       |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 8-2. PEOPLE CURRENTLY WITH HEALTH INSURANCE WHO WERE WITHOUT HEALTH INSURANCE SOMETIME IN THE LAST 12 MONTHS, AMONG THOSE AGE 40 YEARS AND OLDER**

|                                        | Persons reporting there was a time they were without health insurance sometime in the last 12 months ~ |     |      |        |          | Persons reporting they have heard of the Maryland Health Insurance Plan |      |      |        |          |
|----------------------------------------|--------------------------------------------------------------------------------------------------------|-----|------|--------|----------|-------------------------------------------------------------------------|------|------|--------|----------|
| Selected Characteristic                | N                                                                                                      | n   | wt % | 95% CI | Stat Sig | N                                                                       | n    | wt % | 95% CI | Stat Sig |
| <b>Total Population</b>                | 4854                                                                                                   | 155 | 3%   | 3-4%   |          | 5037                                                                    | 1579 | 31%  | 30-33% |          |
| <b>Area of Residence</b>               | ^                                                                                                      |     |      |        |          | ^                                                                       |      |      |        |          |
| Urban                                  | 2905                                                                                                   | 91  | 3%   | 3-4%   |          | 3006                                                                    | 927  | 31%  | 29-33% |          |
| Rural                                  | 1949                                                                                                   | 64  | 3%   | 2-4%   |          | 2031                                                                    | 652  | 32%  | 29-34% |          |
| <b>Gender</b>                          | ^                                                                                                      |     |      |        |          | **                                                                      |      |      |        |          |
| Male                                   | 1799                                                                                                   | 58  | 3%   | 2-4%   |          | 1876                                                                    | 505  | 27%  | 24-29% |          |
| Female                                 | 3055                                                                                                   | 97  | 3%   | 2-4%   |          | 3161                                                                    | 1074 | 35%  | 33-37% |          |
| <b>Age</b>                             | **                                                                                                     |     |      |        |          | ^                                                                       |      |      |        |          |
| 40-49 years                            | 1252                                                                                                   | 54  | 4%   | 3-5%   |          | 1344                                                                    | 444  | 33%  | 30-36% |          |
| 50-64 years                            | 1920                                                                                                   | 68  | 4%   | 3-5%   |          | 2032                                                                    | 662  | 32%  | 29-34% |          |
| 65 years and above                     | 1682                                                                                                   | 33  | 2%   | 1-3%   |          | 1661                                                                    | 473  | 28%  | 26-31% |          |
| <b>Race</b>                            | **                                                                                                     |     |      |        |          | ^                                                                       |      |      |        |          |
| White                                  | 3943                                                                                                   | 99  | 2%   | 2-3%   |          | 4034                                                                    | 1265 | 31%  | 29-33% |          |
| African American or Black              | 749                                                                                                    | 36  | 5%   | 3-6%   |          | 815                                                                     | 255  | 32%  | 28-36% |          |
| Other                                  | 162                                                                                                    | 20  | 10%  | 5-16%  |          | 188                                                                     | 59   | 29%  | 21-37% |          |
| <b>Gender and Race</b>                 | **                                                                                                     |     |      |        |          | **                                                                      |      |      |        |          |
| White male                             | 1516                                                                                                   | 36  | 2%   | 1-3%   |          | 1570                                                                    | 425  | 27%  | 25-30% |          |
| African American male                  | 219                                                                                                    | 16  | 6%   | 3-9%   |          | 234                                                                     | 56   | 24%  | 18-31% |          |
| Other male                             | 64                                                                                                     | 6   | 11%  | 1-20%  |          | 72                                                                      | 24   | 29%  | 16-42% |          |
| White female                           | 2427                                                                                                   | 63  | 3%   | 2-3%   |          | 2464                                                                    | 840  | 35%  | 33-37% |          |
| African American female                | 530                                                                                                    | 20  | 4%   | 2-6%   |          | 581                                                                     | 199  | 37%  | 33-42% |          |
| Other female                           | 98                                                                                                     | 14  | 10%  | 4-16%  |          | 116                                                                     | 35   | 29%  | 20-38% |          |
| <b>Marital Status</b>                  | **                                                                                                     |     |      |        |          | ^                                                                       |      |      |        |          |
| Married or partner of unmarried couple | 2966                                                                                                   | 81  | 3%   | 2-3%   |          | 3015                                                                    | 985  | 32%  | 30-34% |          |
| Divorced or separated                  | 779                                                                                                    | 36  | 5%   | 3-7%   |          | 865                                                                     | 260  | 31%  | 27-35% |          |
| Widowed                                | 745                                                                                                    | 20  | 3%   | 1-5%   |          | 748                                                                     | 218  | 28%  | 24-31% |          |
| Never married                          | 351                                                                                                    | 15  | 5%   | 2-7%   |          | 395                                                                     | 114  | 30%  | 24-35% |          |
| <b>Education</b>                       | ^                                                                                                      |     |      |        |          | ^                                                                       |      |      |        |          |
| Less than high school                  | 341                                                                                                    | 11  | 4%   | 1-7%   |          | 403                                                                     | 106  | 28%  | 22-34% |          |
| High school grad or GED                | 1321                                                                                                   | 54  | 4%   | 3-5%   |          | 1386                                                                    | 421  | 31%  | 28-34% |          |
| College 1-3 years                      | 1177                                                                                                   | 41  | 3%   | 2-5%   |          | 1209                                                                    | 409  | 33%  | 30-37% |          |
| College grad                           | 1068                                                                                                   | 31  | 3%   | 2-5%   |          | 1089                                                                    | 343  | 31%  | 28-35% |          |
| Advanced degree                        | 937                                                                                                    | 15  | 2%   | 1-3%   |          | 938                                                                     | 297  | 30%  | 27-34% |          |
| <b>Employment Status</b>               | **                                                                                                     |     |      |        |          | **                                                                      |      |      |        |          |
| Employed for wages                     | 2199                                                                                                   | 60  | 2%   | 2-3%   |          | 2257                                                                    | 755  | 33%  | 31-36% |          |
| Self-employed                          | 378                                                                                                    | 23  | 7%   | 4-10%  |          | 430                                                                     | 115  | 26%  | 20-31% |          |
| Retired                                | 1706                                                                                                   | 32  | 2%   | 1-3%   |          | 1686                                                                    | 502  | 29%  | 26-32% |          |
| Other                                  | 560                                                                                                    | 39  | 7%   | 4-9%   |          | 649                                                                     | 202  | 31%  | 27-36% |          |
| <b>Household Income</b>                | **                                                                                                     |     |      |        |          | ^                                                                       |      |      |        |          |
| <\$25,000                              | 725                                                                                                    | 52  | 8%   | 6-11%  |          | 848                                                                     | 251  | 31%  | 27-35% |          |
| \$25,000-<\$35,000                     | 417                                                                                                    | 14  | 4%   | 1-6%   |          | 444                                                                     | 140  | 28%  | 23-33% |          |
| \$35,000-<\$50,000                     | 598                                                                                                    | 19  | 4%   | 2-6%   |          | 605                                                                     | 190  | 32%  | 28-37% |          |
| \$50,000-<\$75,000                     | 716                                                                                                    | 11  | 1%   | 1-2%   |          | 737                                                                     | 259  | 35%  | 31-40% |          |
| \$75,000 or greater                    | 1668                                                                                                   | 37  | 2%   | 1-3%   |          | 1649                                                                    | 532  | 31%  | 28-34% |          |
| Don't know/not sure                    | 287                                                                                                    | 10  | 5%   | 1-8%   |          | 313                                                                     | 80   | 27%  | 21-33% |          |
| Refused                                | 443                                                                                                    | 12  | 2%   | 0-4%   |          | 441                                                                     | 127  | 29%  | 24-35% |          |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 8-3. PEOPLE REPORTING TO HAVE ONE OR MORE PERSONS THEY THINK OF AS THEIR PERSONAL DOCTOR OR PRIMARY HEALTH CARE PROVIDER, AMONG RESPONDENTS AGE 40 YEARS AND OLDER ~**

| <b>Selected Characteristic</b>            | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
|-------------------------------------------|----------|----------|-------------|---------------|-----------------|
| <b>Total Population</b>                   | 5136     | 4852     | 93%         | 92-94%        |                 |
| <b>Area of Residence</b>                  |          |          |             |               | *               |
| Urban                                     | 3065     | 2882     | 93%         | 92-94%        |                 |
| Rural                                     | 2071     | 1970     | 94%         | 93-96%        |                 |
| <b>Gender</b>                             |          |          |             |               | **              |
| Male                                      | 1909     | 1773     | 91%         | 89-93%        |                 |
| Female                                    | 3227     | 3079     | 95%         | 94-96%        |                 |
| <b>Age</b>                                |          |          |             |               | **              |
| 40-49 years                               | 1369     | 1239     | 89%         | 86-91%        |                 |
| 50-64 years                               | 2073     | 1954     | 95%         | 93-96%        |                 |
| 65 years and above                        | 1694     | 1659     | 98%         | 97-99%        |                 |
| <b>Race</b>                               |          |          |             |               | ^               |
| White                                     | 4114     | 3908     | 94%         | 93-95%        |                 |
| African American or Black                 | 832      | 776      | 92%         | 90-94%        |                 |
| Other                                     | 190      | 168      | 91%         | 86-96%        |                 |
| <b>Gender and Race</b>                    |          |          |             |               | **              |
| White male                                | 1596     | 1494     | 92%         | 90-94%        |                 |
| African American male                     | 241      | 218      | 89%         | 84-94%        |                 |
| Other male                                | 72       | 61       | 88%         | 80-97%        |                 |
| White female                              | 2518     | 2414     | 96%         | 95-97%        |                 |
| African American female                   | 591      | 558      | 94%         | 92-96%        |                 |
| Other female                              | 118      | 107      | 93%         | 88-98%        |                 |
| <b>Marital Status</b>                     |          |          |             |               | **              |
| Married or partner of<br>unmarried couple | 3067     | 2935     | 94%         | 93-96%        |                 |
| Divorced or separated                     | 881      | 799      | 90%         | 87-93%        |                 |
| Widowed                                   | 768      | 746      | 97%         | 95-99%        |                 |
| Never married                             | 403      | 358      | 85%         | 81-90%        |                 |
| <b>Education</b>                          |          |          |             |               | **              |
| Less than high school                     | 409      | 359      | 81%         | 75-87%        |                 |
| High school grad or GED                   | 1419     | 1335     | 93%         | 91-95%        |                 |
| College 1-3 years                         | 1238     | 1177     | 94%         | 93-96%        |                 |
| College grad                              | 1107     | 1057     | 95%         | 94-97%        |                 |
| Advanced degree                           | 952      | 915      | 95%         | 93-97%        |                 |
| <b>Employment Status</b>                  |          |          |             |               | **              |
| Employed for wages                        | 2291     | 2161     | 93%         | 92-94%        |                 |
| Self-employed                             | 437      | 390      | 89%         | 86-93%        |                 |
| Retired                                   | 1725     | 1684     | 98%         | 96-99%        |                 |
| Other                                     | 669      | 605      | 89%         | 86-92%        |                 |
| <b>Household Income</b>                   |          |          |             |               | **              |
| <\$25,000                                 | 866      | 776      | 86%         | 83-90%        |                 |
| \$25,000-<\$35,000                        | 451      | 426      | 90%         | 85-95%        |                 |
| \$35,000-<\$50,000                        | 620      | 593      | 95%         | 93-97%        |                 |
| \$50,000-<\$75,000                        | 748      | 713      | 95%         | 93-97%        |                 |
| \$75,000 or greater                       | 1679     | 1611     | 95%         | 94-96%        |                 |
| Don't know/not sure                       | 319      | 300      | 93%         | 90-97%        |                 |
| Refused                                   | 453      | 433      | 95%         | 92-98%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 8-4. RESPONSES TO THE QUESTION, "WHAT KIND OF PLACE DO YOU GO TO MOST OFTEN WHEN YOU ARE SICK OR YOU NEED ADVICE ABOUT YOUR HEALTH?" AMONG THOSE AGE 40 YEARS AND OLDER \***

| <b>Selected Response</b>         | <b>wt %</b> |
|----------------------------------|-------------|
| A doctor's office or HMO         | 84%         |
| A clinic or health center        | 7%          |
| A hospital emergency room        | 3%          |
| A hospital outpatient department | 2%          |
| An urgent care center            | 1%          |
| Some other kind of place         | 2%          |

\* Only one answer was recorded from 5093 respondents

TABLE 8-5. PREVALENCE OF CANCER SCREENING AND ACCESS TO HEALTH CARE

|                                                                                                                                  | Ever had FOBT ~ |      |     |        |          | Ever had sigmoidoscopy or colonoscopy ~ |      |     |        |          | Ever had Prostate Specific Antigen Test # |      |     |        |          |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------|------|-----|--------|----------|-----------------------------------------|------|-----|--------|----------|-------------------------------------------|------|-----|--------|----------|
| Selected characteristic                                                                                                          | N               | n    | wt% | 95%CI  | Stat Sig | N                                       | n    | wt% | 95%CI  | Stat Sig | N                                         | n    | wt% | 95%CI  | Stat Sig |
| <b>Do you have health insurance?</b>                                                                                             |                 |      |     |        | **       |                                         |      |     |        | **       |                                           |      |     |        | **       |
| Yes                                                                                                                              | 3572            | 2086 | 58% | 56-60% |          | 3580                                    | 2530 | 70% | 68-72% |          | 1277                                      | 1009 | 76% | 73-79% |          |
| No                                                                                                                               | 167             | 60   | 31% | 23-40% |          | 166                                     | 52   | 31% | 22-40% |          | 51                                        | 16   | 30% | 15-46% |          |
| <b>Was there a time you were without health insurance in the last 12 months?</b>                                                 |                 |      |     |        | ^        |                                         |      |     |        | *        |                                           |      |     |        | ^        |
| Yes                                                                                                                              | 101             | 50   | 53% | 41-65% |          | 100                                     | 59   | 60% | 49-72% |          | 33                                        | 23   | 68% | 49-87% |          |
| No                                                                                                                               | 3468            | 2035 | 58% | 56-60% |          | 3477                                    | 2470 | 71% | 69-72% |          | 1241                                      | 984  | 76% | 73-80% |          |
| <b>How long have you been without health insurance or coverage, among those who did not currently have health care coverage?</b> |                 |      |     |        | ^        |                                         |      |     |        | **       |                                           |      |     |        | ^        |
| Less than a year                                                                                                                 | 35              | 12   | 33% | 16-51% |          | 35                                      | 18   | 52% | 33-71% |          | 7                                         | 2    | 26% | 0-62%  |          |
| One year or longer                                                                                                               | 108             | 40   | 32% | 21-43% |          | 106                                     | 29   | 29% | 18-40% |          | 33                                        | 11   | 35% | 14-56% |          |
| Never had insurance                                                                                                              | 22              | 9    | 32% | 8-56%  |          | 22                                      | 4    | 8%  | 0-17%  |          | 11                                        | 3    | 15% | 0-35%  |          |
| <b>How long has it been since you last visited a doctor for a routine checkup?</b>                                               |                 |      |     |        | **       |                                         |      |     |        | **       |                                           |      |     |        | **       |
| Within the past year (less than one year)                                                                                        | 3180            | 1925 | 60% | 58-62% |          | 3188                                    | 2310 | 72% | 70-74% |          | 1081                                      | 892  | 79% | 76-83% |          |
| Within at least one year but less than two                                                                                       | 247             | 123  | 50% | 43-58% |          | 249                                     | 146  | 54% | 46-62% |          | 109                                       | 77   | 66% | 55-77% |          |
| Within at least two years but less than five                                                                                     | 135             | 58   | 41% | 31-50% |          | 133                                     | 70   | 53% | 43-62% |          | 70                                        | 34   | 46% | 32-59% |          |
| Five years or more (including never)                                                                                             | 155             | 38   | 22% | 14-29% |          | 153                                     | 46   | 30% | 22-39% |          | 59                                        | 18   | 26% | 14-39% |          |
| <b>Do you have one person you think of as your primary health care provider?</b>                                                 |                 |      |     |        | **       |                                         |      |     |        | **       |                                           |      |     |        | **       |
| At least one health care provider                                                                                                | 3580            | 2097 | 58% | 56-60% |          | 3590                                    | 2531 | 70% | 68-72% |          | 1263                                      | 1002 | 77% | 74-80% |          |
| No health care provider                                                                                                          | 153             | 47   | 25% | 16-33% |          | 150                                     | 45   | 28% | 19-36% |          | 63                                        | 23   | 32% | 18-46% |          |

~ Age ≥ 50 years

# Men ≥ 50 years and African American men 45-49 years

~~ Age ≥ 40 years

#~ Women ≥ 40 years with an intact uterus

\*\* p-value ≤ 0.05

\* p-value >0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

TABLE 8-5. PREVALENCE OF CANCER SCREENING AND ACCESS TO HEALTH CARE

|                                                                                                                           | Ever had a mammogram ~~ |      |     |         |          | Ever had a Pap test #~ |      |      |          |          | Ever had oral cancer screening ~~ |      |     |        |          |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------|------|-----|---------|----------|------------------------|------|------|----------|----------|-----------------------------------|------|-----|--------|----------|
| Selected characteristic                                                                                                   | N                       | n    | wt% | 95%CI   | Stat Sig | N                      | n    | wt%  | 95%CI    | Stat Sig | N                                 | n    | wt% | 95%CI  | Stat Sig |
| Do you have health insurance?                                                                                             | **                      |      |     |         |          | ^                      |      |      |          |          | **                                |      |     |        |          |
| Yes                                                                                                                       | 3055                    | 2905 | 95% | 94-96%  |          | 2026                   | 1989 | 98%  | 97-99%   |          | 4626                              | 2338 | 49% | 47-50% |          |
| No                                                                                                                        | 173                     | 138  | 79% | 72-86%  |          | 117                    | 111  | 96%  | 93-100%  |          | 272                               | 67   | 23% | 17-29% |          |
| Was there a time you were without health insurance in the last 12 months?                                                 | **                      |      |     |         |          | ^                      |      |      |          |          | ^                                 |      |     |        |          |
| Yes                                                                                                                       | 97                      | 78   | 82% | 74-91%  |          | 68                     | 66   | 98%  | 94-100%  |          | 149                               | 63   | 45% | 35-55% |          |
| No                                                                                                                        | 2957                    | 2826 | 95% | 94-96%  |          | 1957                   | 1922 | 98%  | 97-99%   |          | 4473                              | 2274 | 49% | 47-51% |          |
| How long have you been without health insurance or coverage, among those who did not currently have health care coverage? | ^                       |      |     |         |          | ^                      |      |      |          |          | ^                                 |      |     |        |          |
| Less than a year                                                                                                          | 37                      | 30   | 81% | 66-95%  |          | 22                     | 22   | 100% | 100-100% |          | 52                                | 15   | 33% | 17-50% |          |
| One year or longer                                                                                                        | 117                     | 93   | 78% | 68-87%  |          | 79                     | 75   | 96%  | 92-100%  |          | 178                               | 44   | 22% | 14-29% |          |
| Never had insurance                                                                                                       | 19                      | 15   | 86% | 71-100% |          | 15                     | 13   | 93%  | 81-100%  |          | 39                                | 8    | 16% | 4-28%  |          |
| How long has it been since you last visited a doctor for a routine checkup?                                               | **                      |      |     |         |          | **                     |      |      |          |          | **                                |      |     |        |          |
| Within the past year (less than one year)                                                                                 | 2737                    | 2619 | 95% | 94-96%  |          | 1781                   | 1750 | 98%  | 98-99%   |          | 4037                              | 2030 | 48% | 46-50% |          |
| Within at least one year but less than two                                                                                | 230                     | 212  | 90% | 85-95%  |          | 167                    | 163  | 98%  | 95-100%  |          | 394                               | 186  | 44% | 38-50% |          |
| Within at least two years but less than five                                                                              | 118                     | 100  | 86% | 79-93%  |          | 93                     | 90   | 95%  | 89-100%  |          | 213                               | 98   | 48% | 40-56% |          |
| Five years or more (including never)                                                                                      | 127                     | 99   | 81% | 73-89%  |          | 89                     | 83   | 93%  | 85-100%  |          | 231                               | 85   | 36% | 28-44% |          |
| Do you have one person you think of as your primary health care provider?                                                 | **                      |      |     |         |          | ^                      |      |      |          |          | **                                |      |     |        |          |
| At least one health care provider                                                                                         | 3078                    | 2926 | 94% | 93-95%  |          | 2033                   | 1996 | 98%  | 97-99%   |          | 4619                              | 2317 | 48% | 46-50% |          |
| No health care provider                                                                                                   | 147                     | 114  | 80% | 73-88%  |          | 109                    | 102  | 96%  | 93-99%   |          | 271                               | 83   | 29% | 23-36% |          |

~ Age ≥ 50 years

# Men ≥ 50 years and African American men 45-49 years

~~ Age ≥ 40 years

#~ Women ≥ 40 years with an intact uterus

\*\* p-value ≤ 0.05

\* p-value >0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 8-6. PREVALENCE OF UP-TO-DATE CANCER SCREENING (ACCORDING TO HEALTHY PEOPLE 2010 OBJECTIVES OR AMERICAN CANCER SOCIETY GUIDELINES) AND ACCESS TO HEALTH CARE**

|                                                                                                                                  | *Had FOBT in the last 2 years ~ |      |     |        |          | ~* Had Prostatic Specific Antigen Test in the last year # |     |     |        |          | ~*Had a Digital Rectal Exam in the last year # |     |     |        |          |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------|-----|--------|----------|-----------------------------------------------------------|-----|-----|--------|----------|------------------------------------------------|-----|-----|--------|----------|
| Selected characteristic                                                                                                          | N                               | n    | wt% | 95%CI  | Stat Sig | N                                                         | n   | wt% | 95%CI  | Stat Sig | N                                              | n   | wt% | 95%CI  | Stat Sig |
| <b>Do you have Health Insurance?</b>                                                                                             |                                 |      |     |        |          |                                                           |     |     |        |          |                                                |     |     |        |          |
| Yes                                                                                                                              | 3572                            | 1133 | 33% | 31-35% |          | 1277                                                      | 776 | 59% | 55-62% |          | 1361                                           | 789 | 59% | 55-62% |          |
| No                                                                                                                               | 167                             | 32   | 16% | 10-23% |          | 51                                                        | 8   | 15% | 3-28%  |          | 59                                             | 15  | 24% | 10-38% |          |
| <b>Was there a time you were without health insurance in the last 12 months?</b>                                                 |                                 |      |     |        |          |                                                           |     |     |        |          |                                                |     |     |        |          |
| Yes                                                                                                                              | 101                             | 30   | 30% | 19-41% |          | 33                                                        | 15  | 48% | 28-68% |          | 40                                             | 17  | 47% | 28-65% |          |
| No                                                                                                                               | 3468                            | 1102 | 33% | 31-35% |          | 1241                                                      | 759 | 59% | 55-62% |          | 1318                                           | 770 | 59% | 56-62% |          |
| <b>How long have you been without health insurance or coverage, among those who did not currently have health care coverage?</b> |                                 |      |     |        |          |                                                           |     |     |        |          |                                                |     |     |        |          |
| Less than a year                                                                                                                 | 35                              | 7    | 20% | 5-34%  |          | 7                                                         | 2   | 26% | 0-62%  |          | 9                                              | 2   | 21% | 0-52%  |          |
| One year or longer                                                                                                               | 108                             | 17   | 14% | 6-23%  |          | 33                                                        | 4   | 15% | 0-33%  |          | 38                                             | 8   | 24% | 5-42%  |          |
| Never had insurance                                                                                                              | 22                              | 8    | 24% | 5-44%  |          | 11                                                        | 2   | 9%  | 0-23%  |          | 11                                             | 4   | 19% | 0-41%  |          |
| <b>How long has it been since you last visited a doctor for a routine checkup?</b>                                               |                                 |      |     |        |          |                                                           |     |     |        |          |                                                |     |     |        |          |
| Within the past year (less than one year)                                                                                        | 3180                            | 1108 | 36% | 34-38% |          | 1081                                                      | 748 | 67% | 63-70% |          | 1158                                           | 766 | 67% | 63-70% |          |
| Within at least one year but less than two                                                                                       | 247                             | 43   | 20% | 13-27% |          | 109                                                       | 19  | 15% | 7-23%  |          | 118                                            | 19  | 16% | 7-25%  |          |
| Within at least two years, but less than five                                                                                    | 135                             | 8    | 4%  | 1-8%   |          | 70                                                        | 7   | 9%  | 2-16%  |          | 73                                             | 6   | 7%  | 1-12%  |          |
| Five years or more (including never)                                                                                             | 155                             | 6    | 4%  | 0-8%   |          | 59                                                        | 7   | 12% | 2-21%  |          | 62                                             | 9   | 11% | 3-18%  |          |
| <b>Do you have one person you think of as your primary health care provider?</b>                                                 |                                 |      |     |        |          |                                                           |     |     |        |          |                                                |     |     |        |          |
| At least one health care provider                                                                                                | 3580                            | 1146 | 33% | 31-35% |          | 1263                                                      | 773 | 59% | 56-63% |          | 1352                                           | 794 | 59% | 56-63% |          |
| No health care provider                                                                                                          | 153                             | 19   | 12% | 5-20%  |          | 63                                                        | 11  | 16% | 5-26%  |          | 66                                             | 10  | 14% | 4-25%  |          |

\* HP 2010 objectives

~\* American Cancer Society recommendation

~ Age ≥ 50 years

# Men ≥ 50 years and African American men 45-49 years

~~ Age ≥ 40 years

#~ Women ≥ 40 years with an intact uterus

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1



**TABLE 8-6. PREVALENCE OF UP-TO-DATE CANCER SCREENING (ACCORDING TO HEALTHY PEOPLE 2010 OBJECTIVES OR AMERICAN CANCER SOCIETY GUIDELINES) AND ACCESS TO HEALTH CARE**

|                                                                                                                                  | <b>*Had a mammogram in the last two years ~~</b> |          |            |              |                 | <b>*Had a Pap test within the past three years #~</b> |          |            |              |                 | <b>*Had oral cancer screening in the past year ~~</b> |          |            |              |                 |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------|------------|--------------|-----------------|-------------------------------------------------------|----------|------------|--------------|-----------------|-------------------------------------------------------|----------|------------|--------------|-----------------|
| <b>Selected characteristic</b>                                                                                                   | <b>N</b>                                         | <b>n</b> | <b>wt%</b> | <b>95%CI</b> | <b>Stat Sig</b> | <b>N</b>                                              | <b>n</b> | <b>wt%</b> | <b>95%CI</b> | <b>Stat Sig</b> | <b>N</b>                                              | <b>n</b> | <b>wt%</b> | <b>95%CI</b> | <b>Stat Sig</b> |
| <b>Do you have Health Insurance?</b>                                                                                             |                                                  |          |            |              |                 |                                                       |          |            |              |                 |                                                       |          |            |              |                 |
| Yes                                                                                                                              | 3055                                             | 2577     | 84%        | 83-86%       |                 | 2026                                                  | 1764     | 89%        | 87-90%       |                 | 4626                                                  | 1865     | 38%        | 37-40%       |                 |
| No                                                                                                                               | 173                                              | 90       | 52%        | 43-61%       |                 | 117                                                   | 82       | 72%        | 62-81%       |                 | 272                                                   | 36       | 12%        | 7-17%        |                 |
| <b>Was there a time you were without health insurance in the last 12 months?</b>                                                 |                                                  |          |            |              |                 |                                                       |          |            |              |                 |                                                       |          |            |              |                 |
| Yes                                                                                                                              | 97                                               | 63       | 69%        | 58-80%       |                 | 68                                                    | 51       | 77%        | 65-89%       |                 | 149                                                   | 47       | 37%        | 27-46%       |                 |
| No                                                                                                                               | 2957                                             | 2513     | 85%        | 83-87%       |                 | 1957                                                  | 1712     | 89%        | 88-91%       |                 | 4473                                                  | 1818     | 38%        | 37-40%       |                 |
| <b>How long have you been without health insurance or coverage, among those who did not currently have health care coverage?</b> |                                                  |          |            |              |                 |                                                       |          |            |              |                 |                                                       |          |            |              |                 |
| Less than a year                                                                                                                 | 37                                               | 25       | 72%        | 55-88%       |                 | 22                                                    | 20       | 92%        | 79-100%      |                 | 52                                                    | 9        | 22%        | 7-37%        |                 |
| One year or longer                                                                                                               | 117                                              | 53       | 43%        | 32-54%       |                 | 79                                                    | 50       | 64%        | 52-77%       |                 | 178                                                   | 22       | 10%        | 5-16%        |                 |
| Never had insurance                                                                                                              | 19                                               | 11       | 66%        | 42-90%       |                 | 15                                                    | 11       | 80%        | 58-100%      |                 | 39                                                    | 5        | 9%         | 1-18%        |                 |
| <b>How long has it been since you last visited a doctor for a routine checkup?</b>                                               |                                                  |          |            |              |                 |                                                       |          |            |              |                 |                                                       |          |            |              |                 |
| Within the past year (less than one year)                                                                                        | 2737                                             | 2391     | 87%        | 86-89%       |                 | 1781                                                  | 1582     | 90%        | 89-92%       |                 | 4037                                                  | 1642     | 39%        | 37-41%       |                 |
| Within at least one year but less than two                                                                                       | 230                                              | 162      | 71%        | 64-78%       |                 | 167                                                   | 150      | 91%        | 86-96%       |                 | 394                                                   | 132      | 31%        | 25-36%       |                 |
| Within at least two years, but less than five                                                                                    | 118                                              | 52       | 46%        | 36-57%       |                 | 93                                                    | 62       | 67%        | 56-78%       |                 | 213                                                   | 64       | 33%        | 25-40%       |                 |
| Five years or more (including never)                                                                                             | 127                                              | 55       | 44%        | 33-55%       |                 | 89                                                    | 43       | 52%        | 39-65%       |                 | 231                                                   | 58       | 23%        | 16-30%       |                 |
| <b>Do you have one person you think of as your primary health care provider?</b>                                                 |                                                  |          |            |              |                 |                                                       |          |            |              |                 |                                                       |          |            |              |                 |
| At least one health care provider                                                                                                | 3078                                             | 2593     | 84%        | 83-86%       |                 | 2033                                                  | 1776     | 89%        | 87-91%       |                 | 4619                                                  | 1844     | 38%        | 36-40%       |                 |
| No health care provider                                                                                                          | 147                                              | 70       | 50%        | 41-60%       |                 | 109                                                   | 68       | 68%        | 57-78%       |                 | 271                                                   | 53       | 18%        | 12-23%       |                 |

\* HP 2010 objectives

~\* American Cancer Society recommendation

~ Age ≥ 50 years

# Men ≥ 50 years and African American men 45-49 years

~~ Age ≥ 40 years

#~ Women ≥ 40 years with an intact uterus

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

## Chapter 9. Lifestyle Factors

Tobacco use and high-risk alcohol consumption are modifiable lifestyle risk factors that have been shown to influence the incidence of several diseases, including cancer.<sup>1, 2</sup> Cigarette smoking is causally related to cancer of the lung, mouth, larynx, esophagus, bladder, kidney, and pancreas.<sup>1</sup> Smoking cessation has been shown to decrease the risk of developing smoking-related cancers compared to current smoking. High-risk alcohol consumption is also related to cancers of the liver, esophagus, oral cavity, and larynx.<sup>2</sup> Tobacco use and alcohol abuse are among the leading health indicators targeted by HP 2010. In the MCS 2006, Marylanders age 40 years and older were asked about their use of cigarettes and other forms of tobacco, as well as their alcohol consumption patterns.

### 9.1 Tobacco Use

The HP 2010 target is to reduce the proportion of adult cigarette smokers (18 years of age and older) from the U.S. 1998 baseline of 24% to 12%.<sup>3</sup>

Among Marylanders age 40 years and older:

- Sixteen percent (16%) report that they currently smoke, 32% have smoked in the past, and 51% have never smoked (Table 9-1).
- Significant differences were found between cigarette smoking status and all of the demographic characteristics (Table 9-1).
  - A significantly higher percentage of rural residents currently smoke cigarettes (19%) compared urban residents (15%).
  - A higher proportion of men than women are current smokers (18% vs. 15%).
  - With increasing age, the percent of current smokers declines (ranging from 22% in 40 to 49 year olds to 17% among those age 50 to 64 years to only 7% of those age 65 years and older).
  - A higher proportion of African Americans compared to Whites are current smokers (19% vs. 15%).
  - As education level increased, the percent of current smokers declined. The prevalence of current smoking was almost four times higher among respondents with less than a high school education compared to those with advanced degrees (27% vs. 7%).
  - As income level increased, the percent of those who never smoked increased and the percent of current smokers decreased.

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<sup>1</sup> U.S. Department of Health and Human Services. The health consequences of smoking: a report of the Surgeon General. Washington, DC; 2004. Available at [http://www.cdc.gov/tobacco/sgr/sgr\\_2004/index.htm](http://www.cdc.gov/tobacco/sgr/sgr_2004/index.htm). Last accessed July 11, 2007.

<sup>2</sup> Centers for Disease Control and Prevention. Quick Stats: General Information on Alcohol Use and Health. Centers for Disease Control and Prevention. Available at [http://www.cdc.gov/alcohol/quickstats/general\\_info.htm](http://www.cdc.gov/alcohol/quickstats/general_info.htm). Last accessed July 11, 2007.

<sup>3</sup> U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. Understanding and Improving Health; Objectives for Improving Health. Vol.II, Tobacco Use. Washington, DC: U.S. Government Printing Office, November 2000. Available at <http://www.healthypeople.gov/Document/HTML/Volume2/27Tobacco.htm>. Last accessed July 11, 2007.

Current smokers were asked how many cigarettes they smoke, on average, each day (Table 9-2).

- About one third (34%) reported they smoke at least one pack of cigarettes a day (20 or more cigarettes); 27% smoke from 10 to 19 cigarettes a day; and 39% smoke less than 10 cigarettes per day.
- Among smokers, a higher proportion of those who live in rural areas, or are White males, or are 50 to 64 years of age smoke one or more packs of cigarettes a day.

As an indicator of cigarette addiction level, smokers were asked how soon they have their first cigarette after waking up (Table 9-3).

- More than half (56%) of all smokers said they have their first cigarette within 30 minutes after waking.
- Twenty-nine percent (29%) of smokers said they typically have their first cigarette more than one hour after waking.

MCS 2006 respondents were asked whether and how frequently they currently use chewing tobacco, snuff, or dip. (Data not shown in tables.)

- Among Marylanders age 40 years and older, 0.5% report using smokeless tobacco every day and 0.4% report using these products some days.
- While the prevalence of everyday use of smokeless tobacco was very low in this survey, it was significantly higher among men (compared to women) and rural respondents (compared to urban respondents).

### Smoking Cessation

A number of HP 2010 objectives address smoking cessation. One objective is to increase the proportion of adult smokers who have been counseled by a physician in the past year about smoking cessation. The specific target for this objective is to increase this proportion from the 2001 baseline of 66% to 72%.<sup>4</sup>

- Among Marylanders age 40 years and older who currently smoke cigarettes, 66% reported having been told to stop smoking by a doctor, nurse, or other health care provider during the past 12 months (Table 9-4).
- Compared with younger respondents, a significantly higher proportion of respondents age 50 years and older reported being told to stop smoking.

Another HP 2010 objective is to increase the smoking cessation attempts made by adult smokers (that is, to increase the number adult smokers who stop smoking for one day or longer because they were trying to quit) from a baseline of 41% to a target of 75% (for adults 18 years and older).<sup>3</sup> In the MCS 2006, current smokers were asked whether they had stopped smoking at least one day during the previous 12 months because they were trying to quit smoking (Table 9-4).

- Half (50%) of all current smokers reported they had at least one smoking cessation attempt during the past year.

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<sup>4</sup> U.S. Department of Health and Human Services. Healthy People 2010 Midcourse Review. Washington, DC; 2006. <http://www.healthypeople.gov/data/midcourse/html/focusareas/FA01Objectives.htm>. Last accessed July 6, 2007.

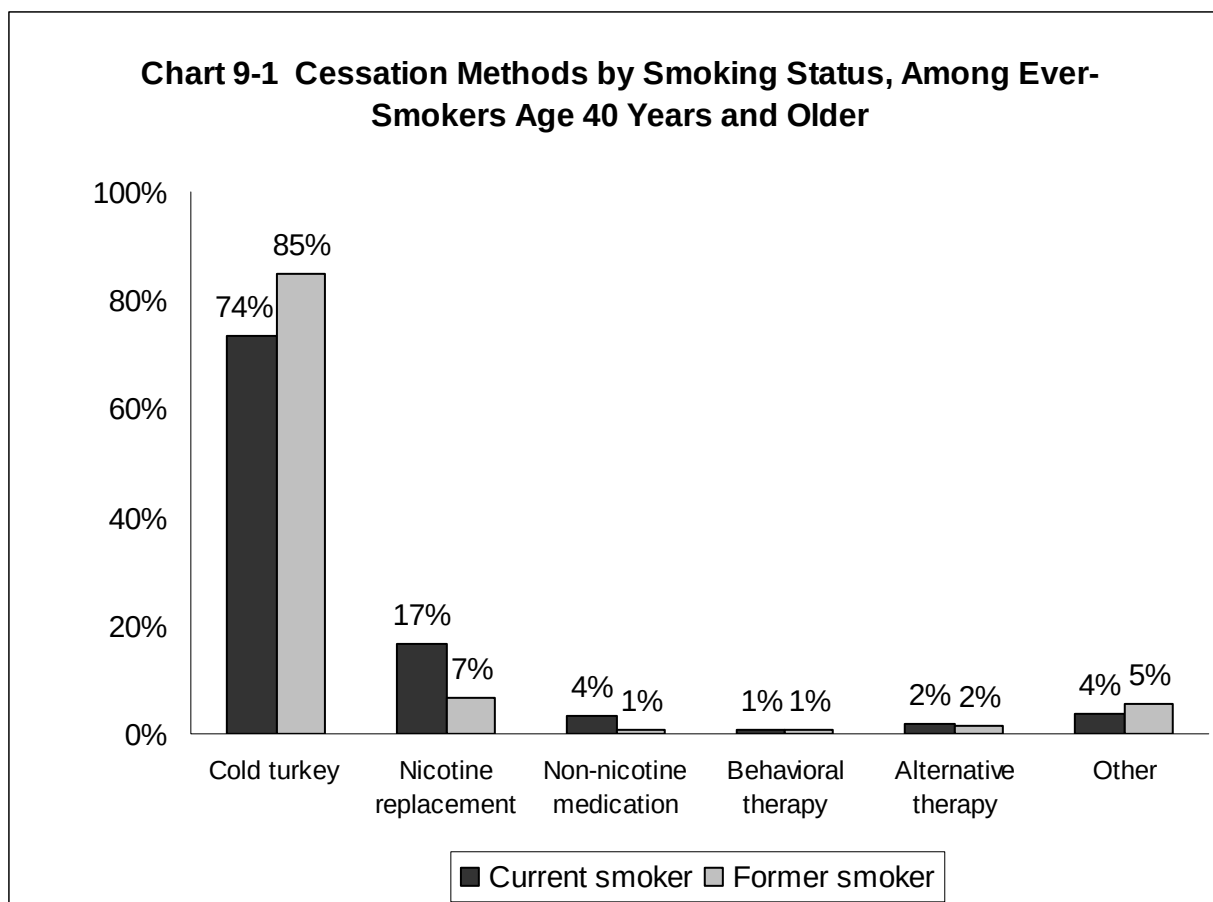
- African American smokers were most likely (61%) to attempt smoking cessation relative to other race groups.
- The proportion of respondents who attempted smoking cessation in the past year did not differ significantly by gender, age, marital status, education level, employment status, or household income.

Current and former smokers were asked which cessation methods they used during their last attempt to stop smoking such as “cold turkey” or quitting on their own without help, nicotine replacement, non-nicotine medication, behavioral therapy, etc. Figure 9-1 shows the distribution of cessation methods used by current and former smokers during their last cessation attempt. It is notable that 85% of the former smokers used “cold turkey” (or quit on their own without help) as a successful cessation method. (Data not shown in tables.)

- Among current smokers, 74% reported quitting on their own without help (or “cold turkey”) on their last cessation attempt (Table 9-4).
- The proportion of current smokers who reported quitting on their own as a smoking cessation method differed significantly by age and race. A higher proportion of younger respondents (ages 40 to 49 years) and African Americans said they tried quitting on their own, compared with persons in other age and race groups.

Former smokers were asked how long it has been since they last smoked cigarettes regularly (Table 9-5).

- The vast majority (83%) reported quitting more than 5 years ago.
- Among former smokers, those who were older (65 years of age or older), White, or have higher education were more likely to report having quit smoking 5 or more years ago.
- Those who were younger (age 40 to 49 years), African American, or have less than a high school education were more likely to stop smoking within the preceding year.



### Smoking Status and Cancer Screening

Smoking status was examined in relation to the various types of cancer screening (Table 9-6).

- Current smokers age 50 years and older were significantly less likely than non-smokers (i.e., never and former smokers) to have ever been screened for CRC by FOBT or by lower GI endoscopy.
- Male smokers in the age groups recommended for PSA testing were less likely than non-smokers to have ever had a PSA test or a DRE.
- While female smokers at least 40 years of age were least likely to have ever been screened for breast cancer by mammogram, no significant differences by smoking status were found in the percent of women screened for cervical cancer by Pap test.
- Current smokers were less likely to have ever been screened for oral cancer than former and never smokers.

## **9.2 Alcohol Consumption**

According to current guidelines of the National Institute on Alcohol Abuse and Alcoholism (NIAAA), men are considered to be at high risk for alcohol-related problems if they consume more than 14 drinks per week or engage in binge drinking, while women are considered

to be at high risk if they consume more than 7 drinks per week or engage in binge drinking.<sup>5</sup> (Note that there are different criteria for men and women because women have proportionally less body water than men, and therefore reach higher blood alcohol levels after drinking the same amount.<sup>5</sup>) The NIAAA has defined binge drinking as a blood alcohol concentration corresponding to consuming 5 drinks or more for men and 4 drinks or more for women in a period of about 2 hours.<sup>6</sup> The definition of binge drinking used by HP 2010 to establish a national baseline (based on the 2002 National Survey on Drug Use and Health) is 5 or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past 30 days.<sup>7,8</sup>

Two HP 2010 objectives related to alcohol consumption include:

1. To reduce the proportion of adults age 18 years and older who engage in binge drinking, from a national baseline in 2002 of 24.3% to a target of 13.4%<sup>7</sup>; and
2. To reduce the proportion of adults who exceed guidelines for low-risk drinking from 1992 baselines of 72% and 74% for females and males, respectively, to a target of 50% for both sexes.<sup>9</sup>

The MCS 2006 included a series of survey questions about the frequency and amount of alcohol consumed during the past 30 days. Based on the survey results, respondents were divided into three groups: non-drinkers, those at low risk for alcohol-related problems, and those at high risk (Table 9-7). For this analysis, high-risk drinking was defined in accordance with NIAAA guidelines, as more than 14 drinks in a week for a man and more than 7 drinks in a week for a woman, or engaging in binge drinking. We have defined low-risk alcohol drinkers as those who consume some alcohol, but less than high-risk drinkers. The MCS questionnaire and analyses define binge drinking as consuming 5 or more drinks on one occasion, consistent with the definition used by HP 2010.

### Binge Drinking

MCS respondents were asked how many times in the past month they had consumed 5 or more drinks on any one occasion. Among all respondents age 40 years and older:

- Nine percent (9%) meet the criteria for binge drinking. (Data not shown in tables.) This prevalence is less than the HP 2010 target of 13.4%.

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<sup>5</sup> Dawson DA, Grant BF, Li T. Quantifying the risks associated with exceeding recommended drinking limits. *Alcohol Clin Exp Res* 2005; 29(5):902-908.

<sup>6</sup> National Institute on Alcohol Abuse and Alcoholism, National Advisory Council on Alcohol Abuse and Alcoholism. Summary of Meeting, February 2004. Available at <http://www.niaaa.nih.gov/AboutNIAAA/AdvisoryCouncil/CouncilMinutes/min2-04.htm>. Last accessed July 11, 2007.

<sup>7</sup> U.S. Department of Health and Human Services. Healthy People 2010 Midcourse Review. Washington, DC; 2006. Available at <http://www.healthypeople.gov/data/midcourse/default.htm#pubs>. Last accessed July 11, 2007.

<sup>8</sup> U.S. Department of Health and Human Services. National Survey on Drug Use and Health, 2002. Substance Abuse and Mental Health Services Administration (SAMSHA). Washington, DC. Available at <http://www.oas.samhsa.gov/nhsda/2k2nsduh/Results/appD.htm>. Last accessed July 11, 2007.

<sup>9</sup> U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. Vol. II. Substance Abuse. Washington, DC: U.S. Government Printing Office, November 2000. Available at <http://www.healthypeople.gov/document/HTML/Volume2/26Substance.htm>. Last accessed July 11, 2007.

- The highest prevalence of binge drinking was found among males, younger respondents, those who were employed, and persons in higher income groups. (Data not shown in tables.)

#### High- and Low-Risk Drinking (Table 9-7)

Among all MCS respondents age 40 years and older:

- Eleven percent (11%) were classified as high-risk drinkers, 45% were low-risk drinkers, and 44% were classified as non-drinkers during the previous 30 days. Based on these findings, this population of Marylanders age 40 years and older has attained the HP 2010 target of reducing the proportion of all adults who are high-risk drinkers to 50% or less.
- A higher proportion of men than women reported they consumed alcohol in the 30 days prior to the survey (62% compared to 51% of women).
- Approximately 16% of men and 7% of women were classified as high-risk drinkers.
- The proportion of high-risk alcohol intake decreased with age; a higher percentage of those under the age of 50 years were high-risk drinkers, compared to older respondents.
- High-risk drinking was more prevalent among Whites than African Americans or respondents of other races.
- Respondents with less than a high school education and those with low income were more likely to be non-drinkers.
- The prevalence of low-risk drinking increased with increasing education or increasing income. The percent of high-risk drinkers was fairly stable across education and income levels.

#### Alcohol Consumption and Cancer Screening

Level of alcohol consumption was examined in relation to the prevalence of various types of cancer screening (Table 9-8). Significant differences in screening prevalence based on alcohol consumption were seen for ever having lower GI endoscopy, ever having a DRE (men), ever having a Pap test (women), and ever having oral cancer screening. Low-risk drinkers had the highest prevalence of ever having endoscopy, DRE, or oral cancer screening. Women who reported drinking (low- and high-risk) had a significantly higher prevalence of ever having a Pap test than non-drinkers, though the difference was small. No significant differences were seen among the other screening tests.

**TABLE 9-1. CIGARETTE SMOKING STATUS BY DEMOGRAPHIC CHARACTERISTICS, AMONG RESPONDENTS AGE 40 YEARS AND OLDER**

|                                |          | Never Smoked ~ |             |               | Previous Smoker ~ |             |               | Current Smoker ~ |             |               |                 |
|--------------------------------|----------|----------------|-------------|---------------|-------------------|-------------|---------------|------------------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b>       | <b>wt %</b> | <b>95% CI</b> | <b>n</b>          | <b>wt %</b> | <b>95% CI</b> | <b>n</b>         | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| Total Population               | 5117     | 2592           | 51%         | 50-53%        | 1751              | 32%         | 31-34%        | 774              | 16%         | 15-18%        |                 |
| <b>Area of Residence</b>       |          |                |             |               |                   |             |               |                  |             |               | **              |
| Urban                          | 3050     | 1602           | 52%         | 50-54%        | 1027              | 32%         | 30-34%        | 421              | 15%         | 14-17%        |                 |
| Rural                          | 2067     | 990            | 47%         | 45-50%        | 724               | 33%         | 31-36%        | 353              | 19%         | 17-21%        |                 |
| <b>Gender</b>                  |          |                |             |               |                   |             |               |                  |             |               | **              |
| Male                           | 1899     | 820            | 45%         | 42-48%        | 773               | 37%         | 34-40%        | 306              | 18%         | 16-20%        |                 |
| Female                         | 3218     | 1772           | 56%         | 54-58%        | 978               | 29%         | 27-31%        | 468              | 15%         | 13-16%        |                 |
| <b>Age</b>                     |          |                |             |               |                   |             |               |                  |             |               | **              |
| 40-49 years                    | 1367     | 764            | 56%         | 53-59%        | 312               | 22%         | 20-25%        | 291              | 22%         | 19-24%        |                 |
| 50-64 years                    | 2069     | 997            | 47%         | 45-50%        | 715               | 36%         | 33-38%        | 357              | 17%         | 15-19%        |                 |
| 65 years and above             | 1681     | 831            | 50%         | 47-53%        | 724               | 43%         | 40-46%        | 126              | 7%          | 6-9%          |                 |
| <b>Race</b>                    |          |                |             |               |                   |             |               |                  |             |               | **              |
| White                          | 4102     | 2043           | 51%         | 49-52%        | 1459              | 34%         | 32-36%        | 600              | 15%         | 14-17%        |                 |
| African American or Black      | 826      | 434            | 51%         | 47-55%        | 248               | 30%         | 26-33%        | 144              | 19%         | 16-23%        |                 |
| Other                          | 189      | 115            | 61%         | 52-69%        | 44                | 24%         | 17-32%        | 30               | 15%         | 9-21%         |                 |
| <b>Gender and Race</b>         |          |                |             |               |                   |             |               |                  |             |               | **              |
| White male                     | 1587     | 674            | 45%         | 42-48%        | 668               | 38%         | 36-41%        | 245              | 16%         | 14-19%        |                 |
| African American male          | 240      | 104            | 43%         | 36-51%        | 85                | 34%         | 27-41%        | 51               | 23%         | 17-29%        |                 |
| Other male                     | 72       | 42             | 55%         | 40-69%        | 20                | 31%         | 17-44%        | 10               | 15%         | 4-25%         |                 |
| White female                   | 2515     | 1369           | 55%         | 53-58%        | 791               | 30%         | 28-32%        | 355              | 14%         | 13-16%        |                 |
| African American female        | 586      | 330            | 57%         | 53-62%        | 163               | 26%         | 22-31%        | 93               | 16%         | 13-20%        |                 |
| Other female                   | 117      | 73             | 65%         | 56-75%        | 24                | 19%         | 11-27%        | 20               | 16%         | 8-23%         |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq 0.05$

\* p-value  $> 0.05 - 0.1$

^ p-value  $> 0.1$



**TABLE 9-1. CIGARETTE SMOKING STATUS BY DEMOGRAPHIC CHARACTERISTICS, AMONG RESPONDENTS AGE 40 YEARS AND OLDER**

|                                        |          | Never Smoked ~ |             |               | Previous Smoker ~ |             |               | Current Smoker ~ |             |               |                 |
|----------------------------------------|----------|----------------|-------------|---------------|-------------------|-------------|---------------|------------------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b> | <b>n</b>       | <b>wt %</b> | <b>95% CI</b> | <b>n</b>          | <b>wt %</b> | <b>95% CI</b> | <b>n</b>         | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Marital Status</b>                  |          |                |             |               |                   |             |               |                  |             |               | <b>**</b>       |
| Married or partner of unmarried couple | 3057     | 1595           | 53%         | 51-55%        | 1075              | 34%         | 32-36%        | 387              | 13%         | 12-15%        |                 |
| Divorced or separated                  | 883      | 376            | 43%         | 38-47%        | 285               | 31%         | 28-35%        | 222              | 26%         | 22-30%        |                 |
| Widowed                                | 762      | 405            | 53%         | 48-57%        | 281               | 35%         | 31-39%        | 76               | 12%         | 9-16%         |                 |
| Never married                          | 400      | 209            | 49%         | 42-55%        | 105               | 22%         | 18-27%        | 86               | 29%         | 23-35%        |                 |
| <b>Education</b>                       |          |                |             |               |                   |             |               |                  |             |               | <b>**</b>       |
| Less than high school                  | 410      | 171            | 38%         | 32-45%        | 145               | 35%         | 28-41%        | 94               | 27%         | 21-33%        |                 |
| High school grad or GED                | 1412     | 670            | 47%         | 43-50%        | 443               | 30%         | 27-33%        | 299              | 23%         | 20-26%        |                 |
| College 1-3 years                      | 1235     | 580            | 49%         | 45-53%        | 458               | 34%         | 31-37%        | 197              | 17%         | 14-20%        |                 |
| College grad                           | 1102     | 591            | 54%         | 50-57%        | 389               | 34%         | 31-38%        | 122              | 12%         | 9-14%         |                 |
| Advanced degree                        | 946      | 576            | 62%         | 59-66%        | 308               | 31%         | 27-34%        | 62               | 7%          | 5-9%          |                 |
| <b>Employment Status</b>               |          |                |             |               |                   |             |               |                  |             |               | <b>**</b>       |
| Employed for wages                     | 2280     | 1223           | 55%         | 52-57%        | 681               | 29%         | 27-31%        | 376              | 17%         | 15-18%        |                 |
| Self-employed                          | 438      | 221            | 49%         | 43-54%        | 141               | 32%         | 27-37%        | 76               | 20%         | 15-25%        |                 |
| Retired                                | 1713     | 817            | 48%         | 45-51%        | 733               | 43%         | 40-46%        | 163              | 10%         | 8-11%         |                 |
| Other                                  | 671      | 321            | 48%         | 43-53%        | 191               | 26%         | 22-30%        | 159              | 26%         | 22-30%        |                 |
| <b>Household Income</b>                |          |                |             |               |                   |             |               |                  |             |               | <b>**</b>       |
| <\$25,000                              | 865      | 394            | 44%         | 40-48%        | 279               | 30%         | 26-34%        | 192              | 26%         | 22-30%        |                 |
| \$25,000-<\$35,000                     | 448      | 211            | 45%         | 39-51%        | 153               | 33%         | 27-39%        | 84               | 22%         | 16-27%        |                 |
| \$35,000-<\$50,000                     | 617      | 285            | 45%         | 40-50%        | 208               | 33%         | 28-37%        | 124              | 22%         | 18-26%        |                 |
| \$50,000-<\$75,000                     | 746      | 381            | 49%         | 45-54%        | 246               | 34%         | 30-38%        | 119              | 17%         | 13-20%        |                 |
| \$75,000 or greater                    | 1672     | 914            | 56%         | 53-59%        | 594               | 33%         | 31-36%        | 164              | 10%         | 9-12%         |                 |
| Don't know/not sure                    | 317      | 163            | 52%         | 46-59%        | 104               | 30%         | 24-36%        | 50               | 18%         | 13-24%        |                 |
| Refused                                | 452      | 244            | 58%         | 52-64%        | 167               | 32%         | 26-37%        | 41               | 11%         | 7-15%         |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

TABLE 9-2. NUMBER OF CIGARETTES SMOKED PER DAY, AMONG CURRENT SMOKERS AGE 40 YEARS AND OLDER ~

|                           |     | Less than 10 cigarettes per day |      |        | 10 to 19 cigarettes per day |      |        | 20 or more cigarettes per day |      |        |          |
|---------------------------|-----|---------------------------------|------|--------|-----------------------------|------|--------|-------------------------------|------|--------|----------|
| Selected Characteristic   | N   | n                               | wt % | 95% CI | n                           | wt % | 95% CI | n                             | wt % | 95% CI | Stat Sig |
| Total Population          | 764 | 267                             | 39%  | 34-43% | 205                         | 27%  | 23-31% | 292                           | 34%  | 30-38% |          |
| <b>Area of Residence</b>  |     |                                 |      |        |                             |      |        |                               |      |        | **       |
| Urban                     | 414 | 164                             | 42%  | 36-47% | 112                         | 28%  | 22-33% | 138                           | 31%  | 26-36% |          |
| Rural                     | 350 | 103                             | 32%  | 25-38% | 93                          | 27%  | 21-32% | 154                           | 42%  | 36-48% |          |
| <b>Gender</b>             |     |                                 |      |        |                             |      |        |                               |      |        | **       |
| Male                      | 302 | 88                              | 35%  | 28-42% | 66                          | 24%  | 18-30% | 148                           | 41%  | 34-48% |          |
| Female                    | 462 | 179                             | 43%  | 38-49% | 139                         | 31%  | 26-36% | 144                           | 26%  | 22-31% |          |
| <b>Age</b>                |     |                                 |      |        |                             |      |        |                               |      |        | **       |
| 40-49 years               | 286 | 95                              | 39%  | 32-46% | 90                          | 32%  | 25-38% | 101                           | 29%  | 23-35% |          |
| 50-64 years               | 355 | 117                             | 36%  | 29-43% | 83                          | 23%  | 17-28% | 155                           | 41%  | 35-48% |          |
| 65 years and above        | 123 | 55                              | 48%  | 38-59% | 32                          | 26%  | 16-35% | 36                            | 26%  | 17-35% |          |
| <b>Race</b>               |     |                                 |      |        |                             |      |        |                               |      |        | **       |
| White                     | 592 | 175                             | 29%  | 24-33% | 157                         | 28%  | 23-33% | 260                           | 43%  | 38-48% |          |
| African American or Black | 142 | 78                              | 59%  | 50-69% | 42                          | 27%  | 19-36% | 22                            | 13%  | 7-20%  |          |
| Other                     | 30  | 14                              | 54%  | 31-77% | 6                           | 17%  | 0-35%  | 10                            | 29%  | 9-49%  |          |
| <b>Gender and Race</b>    |     |                                 |      |        |                             |      |        |                               |      |        | **       |
| White male                | 242 | 57                              | 22%  | 16-28% | 50                          | 25%  | 17-32% | 135                           | 54%  | 46-62% |          |
| African American male     | 50  | 27                              | 62%  | 47-76% | 14                          | 24%  | 12-36% | 9                             | 15%  | 5-25%  |          |
| Other male                | 10  | 4                               | 47%  | 7-87%  | 2                           | 22%  | 0-58%  | 4                             | 31%  | 0-66%  |          |
| White female              | 350 | 118                             | 36%  | 30-42% | 107                         | 32%  | 26-37% | 125                           | 32%  | 27-38% |          |
| African American female   | 92  | 51                              | 57%  | 45-69% | 28                          | 31%  | 20-42% | 13                            | 12%  | 5-19%  |          |
| Other female              | 20  | 10                              | 59%  | 34-84% | 4                           | 13%  | 0-29%  | 6                             | 28%  | 5-51%  |          |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

TABLE 9-2. NUMBER OF CIGARETTES SMOKED PER DAY, AMONG CURRENT SMOKERS AGE 40 YEARS AND OLDER ~

|                                        |     | Less than 10 cigarettes per day |      |        | 10 to 19 cigarettes per day |      |        | 20 or more cigarettes per day |      |        |          |
|----------------------------------------|-----|---------------------------------|------|--------|-----------------------------|------|--------|-------------------------------|------|--------|----------|
| Selected Characteristic                | N   | n                               | wt % | 95% CI | n                           | wt % | 95% CI | n                             | wt % | 95% CI | Stat Sig |
| <b>Marital Status</b>                  |     |                                 |      |        |                             |      |        |                               |      |        | **       |
| Married or partner of unmarried couple | 383 | 138                             | 40%  | 34-46% | 99                          | 25%  | 20-30% | 146                           | 35%  | 29-41% |          |
| Divorced or separated                  | 220 | 62                              | 28%  | 20-36% | 66                          | 34%  | 25-43% | 92                            | 38%  | 30-46% |          |
| Widowed                                | 74  | 34                              | 58%  | 44-73% | 18                          | 20%  | 10-31% | 22                            | 21%  | 10-32% |          |
| Never married                          | 84  | 32                              | 43%  | 29-56% | 22                          | 29%  | 18-41% | 30                            | 28%  | 16-40% |          |
| <b>Education</b>                       |     |                                 |      |        |                             |      |        |                               |      |        | *        |
| Less than high school                  | 91  | 29                              | 36%  | 23-50% | 16                          | 18%  | 8-29%  | 46                            | 45%  | 32-58% |          |
| High school grad or GED                | 294 | 99                              | 37%  | 30-44% | 87                          | 29%  | 23-36% | 108                           | 34%  | 27-41% |          |
| College 1-3 years                      | 196 | 62                              | 32%  | 24-41% | 52                          | 30%  | 21-38% | 82                            | 38%  | 29-46% |          |
| College grad                           | 121 | 49                              | 47%  | 35-58% | 34                          | 29%  | 19-39% | 38                            | 24%  | 16-33% |          |
| Advanced degree                        | 62  | 28                              | 55%  | 39-71% | 16                          | 22%  | 10-34% | 18                            | 23%  | 11-35% |          |
| <b>Employment Status</b>               |     |                                 |      |        |                             |      |        |                               |      |        | ^        |
| Employed for wages                     | 373 | 127                             | 39%  | 32-45% | 109                         | 30%  | 24-35% | 137                           | 32%  | 26-38% |          |
| Self-employed                          | 74  | 21                              | 31%  | 17-45% | 22                          | 31%  | 16-46% | 31                            | 38%  | 24-52% |          |
| Retired                                | 160 | 65                              | 44%  | 34-54% | 40                          | 23%  | 15-30% | 55                            | 34%  | 24-43% |          |
| Other                                  | 157 | 54                              | 40%  | 30-50% | 34                          | 24%  | 15-32% | 69                            | 36%  | 27-45% |          |
| <b>Household Income</b>                |     |                                 |      |        |                             |      |        |                               |      |        | ^        |
| <\$25,000                              | 190 | 58                              | 35%  | 26-44% | 55                          | 31%  | 22-40% | 77                            | 33%  | 25-42% |          |
| \$25,000-<\$35,000                     | 84  | 34                              | 41%  | 27-56% | 21                          | 26%  | 13-38% | 29                            | 33%  | 20-46% |          |
| \$35,000-<\$50,000                     | 122 | 42                              | 38%  | 27-49% | 33                          | 28%  | 19-38% | 47                            | 34%  | 24-44% |          |
| \$50,000-<\$75,000                     | 119 | 38                              | 36%  | 24-48% | 32                          | 26%  | 16-36% | 49                            | 38%  | 27-48% |          |
| \$75,000 or greater                    | 163 | 61                              | 42%  | 32-52% | 48                          | 29%  | 20-37% | 54                            | 30%  | 21-38% |          |
| Don't know/not sure                    | 45  | 21                              | 53%  | 35-71% | 7                           | 15%  | 1-28%  | 17                            | 32%  | 16-49% |          |
| Refused                                | 41  | 13                              | 35%  | 15-55% | 9                           | 20%  | 5-35%  | 19                            | 45%  | 25-65% |          |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 9-3. RESPONSES TO THE QUESTION "HOW SOON AFTER YOU WAKE UP DO YOU SMOKE YOUR FIRST CIGARETTE?" AMONG CURRENT SMOKERS AGE 40 YEARS AND OLDER ~**

|                                |          | Within 30 minutes after waking |             |               | 31 to 60 minutes after waking |             |               | More than 60 minutes after waking |             |               |                 |
|--------------------------------|----------|--------------------------------|-------------|---------------|-------------------------------|-------------|---------------|-----------------------------------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b>                       | <b>wt %</b> | <b>95% CI</b> | <b>n</b>                      | <b>wt %</b> | <b>95% CI</b> | <b>n</b>                          | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| Total Population               | 744      | 421                            | 56%         | 51-60%        | 114                           | 15%         | 12-19%        | 209                               | 29%         | 25-33%        |                 |
| <b>Area of Residence</b>       |          |                                |             |               |                               |             |               |                                   |             |               | *               |
| Urban                          | 405      | 211                            | 54%         | 48-59%        | 69                            | 17%         | 12-21%        | 125                               | 30%         | 25-35%        |                 |
| Rural                          | 339      | 210                            | 62%         | 56-69%        | 45                            | 12%         | 8-16%         | 84                                | 26%         | 20-32%        |                 |
| <b>Gender</b>                  |          |                                |             |               |                               |             |               |                                   |             |               | ^               |
| Male                           | 292      | 163                            | 57%         | 50-64%        | 48                            | 15%         | 10-21%        | 81                                | 27%         | 21-34%        |                 |
| Female                         | 452      | 258                            | 54%         | 49-60%        | 66                            | 15%         | 11-19%        | 128                               | 30%         | 25-35%        |                 |
| <b>Age</b>                     |          |                                |             |               |                               |             |               |                                   |             |               | ^               |
| 40-49 years                    | 282      | 169                            | 58%         | 51-65%        | 34                            | 13%         | 8-18%         | 79                                | 29%         | 22-35%        |                 |
| 50-64 years                    | 343      | 196                            | 57%         | 50-63%        | 58                            | 17%         | 12-21%        | 89                                | 27%         | 21-33%        |                 |
| 65 years and above             | 119      | 56                             | 41%         | 30-51%        | 22                            | 21%         | 12-31%        | 41                                | 38%         | 27-48%        |                 |
| <b>Race</b>                    |          |                                |             |               |                               |             |               |                                   |             |               | ^               |
| White                          | 578      | 329                            | 55%         | 50-60%        | 90                            | 16%         | 12-19%        | 159                               | 29%         | 25-34%        |                 |
| African American or Black      | 137      | 80                             | 60%         | 50-70%        | 18                            | 14%         | 6-22%         | 39                                | 26%         | 18-35%        |                 |
| Other                          | 29       | 12                             | 45%         | 22-68%        | 6                             | 20%         | 3-37%         | 11                                | 35%         | 13-57%        |                 |
| <b>Gender and Race</b>         |          |                                |             |               |                               |             |               |                                   |             |               | ^               |
| White male                     | 234      | 129                            | 56%         | 48-64%        | 40                            | 15%         | 10-20%        | 65                                | 29%         | 22-36%        |                 |
| African American male          | 48       | 29                             | 60%         | 44-76%        | 6                             | 17%         | 4-30%         | 13                                | 23%         | 10-36%        |                 |
| Other male                     | 10       | 5                              | 59%         | 20-98%        | 2                             | 5%          | 0-13%         | 3                                 | 36%         | 0-75%         |                 |
| White female                   | 344      | 200                            | 54%         | 48-60%        | 50                            | 16%         | 12-21%        | 94                                | 30%         | 24-36%        |                 |
| African American female        | 89       | 51                             | 59%         | 48-71%        | 12                            | 11%         | 4-17%         | 26                                | 30%         | 19-41%        |                 |
| Other female                   | 19       | 7                              | 34%         | 8-60%         | 4                             | 31%         | 6-57%         | 8                                 | 35%         | 10-59%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq 0.05$

\* p-value  $> 0.05 - 0.1$

^ p-value  $> 0.1$

**TABLE 9-3. RESPONSES TO THE QUESTION "HOW SOON AFTER YOU WAKE UP DO YOU SMOKE YOUR FIRST CIGARETTE?" AMONG CURRENT SMOKERS AGE 40 YEARS AND OLDER ~**

|                                        |     | Within 30 minutes after waking |     |        | 31 to 60 minutes after waking |     |        | More than 60 minutes after waking |     |        |    |
|----------------------------------------|-----|--------------------------------|-----|--------|-------------------------------|-----|--------|-----------------------------------|-----|--------|----|
| <b>Marital Status</b>                  |     |                                |     |        |                               |     |        |                                   |     |        | ^  |
| Married or partner of unmarried couple | 371 | 192                            | 52% | 45-58% | 67                            | 18% | 13-23% | 112                               | 30% | 25-36% |    |
| Divorced or separated                  | 212 | 134                            | 63% | 55-71% | 31                            | 14% | 9-20%  | 47                                | 23% | 16-30% |    |
| Widowed                                | 74  | 40                             | 57% | 42-72% | 8                             | 12% | 0-24%  | 26                                | 31% | 18-45% |    |
| Never married                          | 84  | 52                             | 59% | 47-72% | 8                             | 10% | 2-18%  | 24                                | 31% | 19-43% |    |
| <b>Education</b>                       |     |                                |     |        |                               |     |        |                                   |     |        | ^  |
| Less than high school                  | 92  | 66                             | 74% | 64-85% | 9                             | 10% | 2-18%  | 17                                | 15% | 7-24%  |    |
| High school grad or GED                | 290 | 167                            | 54% | 47-62% | 47                            | 17% | 11-22% | 76                                | 29% | 22-36% |    |
| College 1-3 years                      | 188 | 100                            | 51% | 42-60% | 28                            | 15% | 9-21%  | 60                                | 34% | 25-42% |    |
| College grad                           | 115 | 58                             | 50% | 38-62% | 19                            | 17% | 7-27%  | 38                                | 34% | 22-45% |    |
| Advanced degree                        | 59  | 30                             | 59% | 43-74% | 11                            | 16% | 6-27%  | 18                                | 25% | 12-38% |    |
| <b>Employment Status</b>               |     |                                |     |        |                               |     |        |                                   |     |        | ^  |
| Employed for wages                     | 362 | 201                            | 56% | 49-62% | 54                            | 16% | 11-21% | 107                               | 29% | 23-34% |    |
| Self-employed                          | 72  | 42                             | 53% | 38-68% | 14                            | 18% | 8-28%  | 16                                | 29% | 15-44% |    |
| Retired                                | 156 | 81                             | 53% | 43-63% | 27                            | 18% | 10-25% | 48                                | 30% | 21-39% |    |
| Other                                  | 154 | 97                             | 60% | 51-70% | 19                            | 12% | 5-18%  | 38                                | 28% | 19-37% |    |
| <b>Household Income</b>                |     |                                |     |        |                               |     |        |                                   |     |        | ** |
| <\$25,000                              | 186 | 122                            | 61% | 52-70% | 18                            | 10% | 5-16%  | 46                                | 28% | 20-37% |    |
| \$25,000-<\$35,000                     | 82  | 45                             | 62% | 49-76% | 17                            | 23% | 11-35% | 20                                | 15% | 7-23%  |    |
| \$35,000-<\$50,000                     | 120 | 67                             | 57% | 46-68% | 20                            | 13% | 7-19%  | 33                                | 30% | 20-41% |    |
| \$50,000-<\$75,000                     | 118 | 61                             | 47% | 35-59% | 20                            | 21% | 10-31% | 37                                | 32% | 21-43% |    |
| \$75,000 or greater                    | 153 | 72                             | 46% | 36-56% | 25                            | 17% | 10-24% | 56                                | 37% | 28-47% |    |
| Don't know/not sure                    | 46  | 32                             | 75% | 60-89% | 7                             | 9%  | 1-16%  | 7                                 | 17% | 3-30%  |    |
| Refused                                | 39  | 22                             | 65% | 47-83% | 7                             | 15% | 1-29%  | 10                                | 19% | 6-33%  |    |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq 0.05$

\* p-value  $> 0.05 - 0.1$

^ p-value  $> 0.1$

**TABLE 9-4. SMOKING CESSATION DURING THE PAST 12 MONTHS BY DEMOGRAPHIC CHARACTERISTICS,  
AMONG RESPONDENTS AGE 40 YEARS AND OLDER**

|                                | Current smokers who were told to stop smoking by a health care professional during the past 12 months ~ |          |             |               |                 | Current smokers who attempted to stop smoking during the past 12 months ~ |          |             |               |                 | Current smokers who went "cold turkey" during their last attempt at smoking cessation during the past 12 months ~ |          |             |               |                 |
|--------------------------------|---------------------------------------------------------------------------------------------------------|----------|-------------|---------------|-----------------|---------------------------------------------------------------------------|----------|-------------|---------------|-----------------|-------------------------------------------------------------------------------------------------------------------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b>                                                                                                | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b>                                                                  | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b>                                                                                                          | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| Total Population               | 771                                                                                                     | 517      | 66%         | 62-71%        |                 | 769                                                                       | 359      | 50%         | 45-54%        |                 | 356                                                                                                               | 249      | 74%         | 68-79%        |                 |
| <b>Area of Residence</b>       |                                                                                                         |          |             |               | ^               |                                                                           |          |             |               | ^               |                                                                                                                   |          |             |               | ^               |
| Urban                          | 421                                                                                                     | 294      | 67%         | 61-72%        |                 | 420                                                                       | 204      | 50%         | 45-56%        |                 | 201                                                                                                               | 144      | 74%         | 67-81%        |                 |
| Rural                          | 350                                                                                                     | 223      | 65%         | 59-71%        |                 | 349                                                                       | 155      | 49%         | 42-55%        |                 | 155                                                                                                               | 105      | 72%         | 63-80%        |                 |
| <b>Gender</b>                  |                                                                                                         |          |             |               | *               |                                                                           |          |             |               | ^               |                                                                                                                   |          |             |               | ^               |
| Male                           | 304                                                                                                     | 189      | 62%         | 56-69%        |                 | 303                                                                       | 131      | 51%         | 44-58%        |                 | 131                                                                                                               | 96       | 77%         | 68-86%        |                 |
| Female                         | 467                                                                                                     | 328      | 70%         | 65-75%        |                 | 466                                                                       | 228      | 49%         | 44-55%        |                 | 225                                                                                                               | 153      | 70%         | 62-77%        |                 |
| <b>Age</b>                     |                                                                                                         |          |             |               | **              |                                                                           |          |             |               | ^               |                                                                                                                   |          |             |               | **              |
| 40-49 years                    | 290                                                                                                     | 176      | 59%         | 52-66%        |                 | 291                                                                       | 142      | 51%         | 44-58%        |                 | 142                                                                                                               | 110      | 80%         | 72-88%        |                 |
| 50-64 years                    | 355                                                                                                     | 250      | 73%         | 67-79%        |                 | 353                                                                       | 163      | 50%         | 43-57%        |                 | 162                                                                                                               | 103      | 66%         | 56-75%        |                 |
| 65 years and above             | 126                                                                                                     | 91       | 74%         | 64-83%        |                 | 125                                                                       | 54       | 44%         | 33-54%        |                 | 52                                                                                                                | 36       | 70%         | 55-85%        |                 |
| <b>Race</b>                    |                                                                                                         |          |             |               | ^               |                                                                           |          |             |               | **              |                                                                                                                   |          |             |               | *               |
| White                          | 597                                                                                                     | 405      | 66%         | 62-71%        |                 | 596                                                                       | 262      | 46%         | 41-51%        |                 | 260                                                                                                               | 177      | 71%         | 65-78%        |                 |
| African American or Black      | 144                                                                                                     | 93       | 65%         | 56-75%        |                 | 143                                                                       | 82       | 61%         | 52-71%        |                 | 82                                                                                                                | 65       | 80%         | 69-90%        |                 |
| Other                          | 30                                                                                                      | 19       | 70%         | 49-91%        |                 | 30                                                                        | 15       | 38%         | 18-59%        |                 | 14                                                                                                                | 7        | 45%         | 13-77%        |                 |
| <b>Gender and Race</b>         |                                                                                                         |          |             |               | ^               |                                                                           |          |             |               | **              |                                                                                                                   |          |             |               | **              |
| White male                     | 243                                                                                                     | 152      | 61%         | 54-69%        |                 | 243                                                                       | 99       | 46%         | 38-54%        |                 | 99                                                                                                                | 71       | 75%         | 64-85%        |                 |
| African American male          | 51                                                                                                      | 32       | 65%         | 50-79%        |                 | 50                                                                        | 31       | 66%         | 51-80%        |                 | 31                                                                                                                | 25       | 82%         | 67-97%        |                 |
| Other male                     | 10                                                                                                      | 5        | 62%         | 23-100%       |                 | 10                                                                        | 1        | 6%          | 0-19%         |                 | 1                                                                                                                 | 0        | 0%          |               |                 |
| White female                   | 354                                                                                                     | 253      | 72%         | 66-77%        |                 | 353                                                                       | 163      | 45%         | 39-51%        |                 | 161                                                                                                               | 106      | 68%         | 60-76%        |                 |
| African American female        | 93                                                                                                      | 61       | 66%         | 55-77%        |                 | 93                                                                        | 51       | 57%         | 45-68%        |                 | 51                                                                                                                | 40       | 77%         | 62-92%        |                 |
| Other female                   | 20                                                                                                      | 14       | 77%         | 55-98%        |                 | 20                                                                        | 14       | 63%         | 37-89%        |                 | 13                                                                                                                | 7        | 49%         | 15-82%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 9-4. SMOKING CESSATION DURING THE PAST 12 MONTHS BY DEMOGRAPHIC CHARACTERISTICS,  
AMONG RESPONDENTS AGE 40 YEARS AND OLDER**

|                                        | Current smokers who were told to stop smoking by a health care professional during the past 12 months ~ |     |     |        |    | Current smokers who attempted to stop smoking during the past 12 months ~ |     |     |        |   | Current smokers who went "cold turkey" during their last attempt at smoking cessation during the past 12 months ~ |     |     |         |
|----------------------------------------|---------------------------------------------------------------------------------------------------------|-----|-----|--------|----|---------------------------------------------------------------------------|-----|-----|--------|---|-------------------------------------------------------------------------------------------------------------------|-----|-----|---------|
| <b>Marital Status</b>                  |                                                                                                         |     |     |        | ** |                                                                           |     |     |        | ^ |                                                                                                                   |     |     | ^       |
| Married or partner of unmarried couple | 386                                                                                                     | 278 | 73% | 67-78% |    | 385                                                                       | 179 | 50% | 44-56% |   | 178                                                                                                               | 124 | 71% | 63-79%  |
| Divorced or separated                  | 221                                                                                                     | 144 | 61% | 53-70% |    | 220                                                                       | 105 | 52% | 43-60% |   | 103                                                                                                               | 69  | 75% | 66-85%  |
| Widowed                                | 76                                                                                                      | 52  | 69% | 55-84% |    | 75                                                                        | 37  | 52% | 38-67% |   | 37                                                                                                                | 27  | 83% | 70-96%  |
| Never married                          | 85                                                                                                      | 41  | 48% | 35-61% |    | 86                                                                        | 37  | 47% | 34-60% |   | 37                                                                                                                | 28  | 76% | 59-93%  |
| <b>Education</b>                       |                                                                                                         |     |     |        | ^  |                                                                           |     |     |        | ^ |                                                                                                                   |     |     | ^       |
| Less than high school                  | 93                                                                                                      | 54  | 52% | 38-65% |    | 93                                                                        | 47  | 58% | 46-71% |   | 47                                                                                                                | 30  | 79% | 67-90%  |
| High school grad or GED                | 297                                                                                                     | 203 | 69% | 63-76% |    | 298                                                                       | 136 | 48% | 41-55% |   | 134                                                                                                               | 94  | 74% | 65-84%  |
| College 1-3 years                      | 197                                                                                                     | 139 | 70% | 62-78% |    | 194                                                                       | 88  | 47% | 38-56% |   | 87                                                                                                                | 55  | 62% | 48-76%  |
| College grad                           | 122                                                                                                     | 81  | 64% | 52-75% |    | 122                                                                       | 60  | 49% | 37-60% |   | 60                                                                                                                | 46  | 78% | 67-90%  |
| Advanced degree                        | 62                                                                                                      | 40  | 69% | 53-84% |    | 62                                                                        | 28  | 57% | 41-73% |   | 28                                                                                                                | 24  | 81% | 61-100% |
| <b>Employment Status</b>               |                                                                                                         |     |     |        | ^  |                                                                           |     |     |        | ^ |                                                                                                                   |     |     | ^       |
| Employed for wages                     | 374                                                                                                     | 251 | 67% | 61-73% |    | 373                                                                       | 169 | 47% | 41-54% |   | 168                                                                                                               | 116 | 74% | 66-82%  |
| Self-employed                          | 76                                                                                                      | 45  | 61% | 46-75% |    | 76                                                                        | 32  | 50% | 36-65% |   | 32                                                                                                                | 23  | 79% | 63-94%  |
| Retired                                | 162                                                                                                     | 121 | 75% | 66-83% |    | 161                                                                       | 70  | 44% | 34-54% |   | 69                                                                                                                | 47  | 61% | 44-78%  |
| Other                                  | 159                                                                                                     | 100 | 61% | 51-70% |    | 159                                                                       | 88  | 59% | 50-69% |   | 87                                                                                                                | 63  | 77% | 66-87%  |
| <b>Household Income</b>                |                                                                                                         |     |     |        | *  |                                                                           |     |     |        | ^ |                                                                                                                   |     |     | ^       |
| <\$25,000                              | 191                                                                                                     | 115 | 57% | 47-66% |    | 191                                                                       | 95  | 54% | 45-63% |   | 93                                                                                                                | 65  | 75% | 64-86%  |
| \$25,000-<\$35,000                     | 84                                                                                                      | 53  | 69% | 56-81% |    | 83                                                                        | 36  | 39% | 24-53% |   | 36                                                                                                                | 28  | 75% | 51-98%  |
| \$35,000-<\$50,000                     | 123                                                                                                     | 93  | 73% | 63-84% |    | 124                                                                       | 52  | 51% | 40-61% |   | 52                                                                                                                | 37  | 69% | 53-86%  |
| \$50,000-<\$75,000                     | 119                                                                                                     | 78  | 70% | 60-80% |    | 119                                                                       | 48  | 39% | 28-50% |   | 48                                                                                                                | 33  | 67% | 50-84%  |
| \$75,000 or greater                    | 164                                                                                                     | 115 | 65% | 56-75% |    | 163                                                                       | 84  | 57% | 47-66% |   | 84                                                                                                                | 56  | 74% | 64-84%  |
| Don't know/not sure                    | 49                                                                                                      | 32  | 62% | 46-79% |    | 49                                                                        | 24  | 48% | 31-65% |   | 23                                                                                                                | 12  | 65% | 43-87%  |
| Refused                                | 41                                                                                                      | 31  | 82% | 68-96% |    | 40                                                                        | 20  | 56% | 37-76% |   | 20                                                                                                                | 18  | 96% | 91-100% |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey, 2006

**TABLE 9-5. RESPONSES TO THE QUESTION "ABOUT HOW LONG HAS IT BEEN SINCE YOU LAST SMOKED CIGARETTES DAILY?" AMONG FORMER SMOKERS AGE 40 AND OLDER ~**

|                                |          | Within the past year |             |               | 1 to 5 years ago |             |               | More than 5 years ago |             |               |                 |
|--------------------------------|----------|----------------------|-------------|---------------|------------------|-------------|---------------|-----------------------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b>             | <b>wt %</b> | <b>95% CI</b> | <b>n</b>         | <b>wt %</b> | <b>95% CI</b> | <b>n</b>              | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| Total Population               | 1741     | 88                   | 6%          | 4-8%          | 169              | 11%         | 9-13%         | 1484                  | 83%         | 81-86%        |                 |
| <b>Area of Residence</b>       |          |                      |             |               |                  |             |               |                       |             |               | ^               |
| Urban                          | 1022     | 46                   | 6%          | 4-8%          | 97               | 11%         | 8-13%         | 879                   | 84%         | 81-87%        |                 |
| Rural                          | 719      | 42                   | 7%          | 5-9%          | 72               | 11%         | 8-14%         | 605                   | 82%         | 79-85%        |                 |
| <b>Gender</b>                  |          |                      |             |               |                  |             |               |                       |             |               | ^               |
| Male                           | 768      | 39                   | 7%          | 4-10%         | 76               | 12%         | 9-15%         | 653                   | 81%         | 78-85%        |                 |
| Female                         | 973      | 49                   | 5%          | 4-7%          | 93               | 10%         | 7-12%         | 831                   | 85%         | 82-88%        |                 |
| <b>Age</b>                     |          |                      |             |               |                  |             |               |                       |             |               | **              |
| 40-49 years                    | 312      | 35                   | 11%         | 7-16%         | 44               | 15%         | 10-20%        | 233                   | 74%         | 67-80%        |                 |
| 50-64 years                    | 708      | 36                   | 5%          | 3-7%          | 74               | 11%         | 8-14%         | 598                   | 84%         | 80-87%        |                 |
| 65 years and above             | 721      | 17                   | 3%          | 1-5%          | 51               | 7%          | 5-9%          | 653                   | 90%         | 87-93%        |                 |
| <b>Race</b>                    |          |                      |             |               |                  |             |               |                       |             |               | **              |
| White                          | 1451     | 57                   | 4%          | 3-5%          | 125              | 9%          | 7-11%         | 1269                  | 87%         | 85-89%        |                 |
| African American or Black      | 246      | 26                   | 14%         | 8-20%         | 36               | 15%         | 9-21%         | 184                   | 71%         | 64-79%        |                 |
| Other                          | 44       | 5                    | 7%          | 0-15%         | 8                | 15%         | 3-28%         | 31                    | 78%         | 63-92%        |                 |
| <b>Gender and Race</b>         |          |                      |             |               |                  |             |               |                       |             |               | **              |
| White male                     | 663      | 26                   | 4%          | 2-6%          | 59               | 10%         | 7-13%         | 578                   | 86%         | 83-90%        |                 |
| African American male          | 85       | 12                   | 18%         | 7-28%         | 13               | 16%         | 6-26%         | 60                    | 66%         | 54-79%        |                 |
| Other male                     | 20       | 1                    | 2%          | 0-7%          | 4                | 24%         | 2-45%         | 15                    | 74%         | 52-96%        |                 |
| White female                   | 788      | 31                   | 3%          | 2-5%          | 66               | 9%          | 6-11%         | 691                   | 88%         | 85-91%        |                 |
| African American female        | 161      | 14                   | 10%         | 4-15%         | 23               | 13%         | 8-19%         | 124                   | 77%         | 69-84%        |                 |
| Other female                   | 24       | 4                    | 13%         | 0-30%         | 4                | 4%          | 0-10%         | 16                    | 83%         | 65-100%       |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1



**TABLE 9-5. RESPONSES TO THE QUESTION "ABOUT HOW LONG HAS IT BEEN SINCE YOU LAST SMOKED CIGARETTES DAILY?" AMONG FORMER SMOKERS AGE 40 AND OLDER ~**

|                                        |          | Within the past year |             |               | 1 to 5 years ago |             |               | More than 5 years ago |             |               |                 |
|----------------------------------------|----------|----------------------|-------------|---------------|------------------|-------------|---------------|-----------------------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b> | <b>n</b>             | <b>wt %</b> | <b>95% CI</b> | <b>n</b>         | <b>wt %</b> | <b>95% CI</b> | <b>n</b>              | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Marital Status</b>                  |          |                      |             |               |                  |             |               |                       |             |               | <b>**</b>       |
| Married or partner of unmarried couple | 1072     | 47                   | 6%          | 3-8%          | 94               | 9%          | 7-12%         | 931                   | 85%         | 82-88%        |                 |
| Divorced or separated                  | 281      | 24                   | 12%         | 6-17%         | 33               | 14%         | 8-20%         | 224                   | 74%         | 67-81%        |                 |
| Widowed                                | 280      | 11                   | 3%          | 1-5%          | 25               | 11%         | 6-16%         | 244                   | 86%         | 81-91%        |                 |
| Never married                          | 104      | 6                    | 5%          | 0-10%         | 16               | 17%         | 8-25%         | 82                    | 78%         | 68-87%        |                 |
| <b>Education</b>                       |          |                      |             |               |                  |             |               |                       |             |               | <b>**</b>       |
| Less than high school                  | 144      | 10                   | 13%         | 3-23%         | 17               | 20%         | 8-31%         | 117                   | 67%         | 54-80%        |                 |
| High school grad or GED                | 441      | 31                   | 7%          | 4-10%         | 56               | 15%         | 10-19%        | 354                   | 78%         | 73-83%        |                 |
| College 1-3 years                      | 457      | 26                   | 7%          | 4-10%         | 53               | 12%         | 8-16%         | 378                   | 81%         | 77-86%        |                 |
| College grad                           | 387      | 14                   | 5%          | 1-9%          | 25               | 6%          | 4-9%          | 348                   | 89%         | 84-93%        |                 |
| Advanced degree                        | 304      | 6                    | 3%          | 0-5%          | 17               | 6%          | 3-8%          | 281                   | 92%         | 88-96%        |                 |
| <b>Employment Status</b>               |          |                      |             |               |                  |             |               |                       |             |               | <b>**</b>       |
| Employed for wages                     | 676      | 42                   | 6%          | 4-9%          | 81               | 13%         | 10-17%        | 553                   | 80%         | 76-84%        |                 |
| Self-employed                          | 139      | 4                    | 2%          | 0-4%          | 13               | 10%         | 4-16%         | 122                   | 88%         | 82-95%        |                 |
| Retired                                | 730      | 20                   | 4%          | 1-6%          | 49               | 7%          | 5-9%          | 661                   | 90%         | 86-93%        |                 |
| Other                                  | 191      | 22                   | 16%         | 8-23%         | 25               | 13%         | 7-19%         | 144                   | 72%         | 63-80%        |                 |
| <b>Household Income</b>                |          |                      |             |               |                  |             |               |                       |             |               | <b>**</b>       |
| <\$25,000                              | 276      | 20                   | 13%         | 6-21%         | 36               | 15%         | 9-20%         | 220                   | 72%         | 64-80%        |                 |
| \$25,000-<\$35,000                     | 153      | 7                    | 7%          | 1-13%         | 17               | 16%         | 5-27%         | 129                   | 77%         | 66-89%        |                 |
| \$35,000-<\$50,000                     | 208      | 5                    | 2%          | 0-5%          | 19               | 9%          | 4-13%         | 184                   | 89%         | 84-94%        |                 |
| \$50,000-<\$75,000                     | 244      | 21                   | 9%          | 5-13%         | 23               | 10%         | 5-15%         | 200                   | 81%         | 75-87%        |                 |
| \$75,000 or greater                    | 592      | 23                   | 4%          | 1-7%          | 51               | 9%          | 6-12%         | 518                   | 87%         | 83-90%        |                 |
| Don't know/not sure                    | 102      | 6                    | 6%          | 1-11%         | 11               | 14%         | 5-24%         | 85                    | 80%         | 70-90%        |                 |
| Refused                                | 166      | 6                    | 3%          | 0-6%          | 12               | 8%          | 3-12%         | 148                   | 89%         | 83-94%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq 0.05$

\* p-value  $> 0.05 - 0.1$

^ p-value  $> 0.1$

TABLE 9-6. CANCER SCREENING PRACTICES BY SMOKING STATUS, AMONG RESPONDENTS AGE 40 YEARS AND OLDER

|                                                                                                                                        | Never Smokers |      |     |        | Former Smokers |      |     |        | Current Smokers |     |     |         |          |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------|------|-----|--------|----------------|------|-----|--------|-----------------|-----|-----|---------|----------|
| Screening Test                                                                                                                         | N             | n    | wt% | 95%CI  | N              | n    | wt% | 95%CI  | N               | n   | wt% | 95%CI   | Stat Sig |
| Persons reporting to have ever had a fecal occult blood test (Age $\geq$ 50 years)                                                     | 1815          | 1027 | 56% | 53-59% | 1422           | 875  | 60% | 57-64% | 481             | 235 | 52% | 46-57%  | **       |
| Persons reporting to have ever had a sigmoidoscopy or colonoscopy (lower GI endoscopy) (Age $\geq$ 50 years)                           | 1817          | 1256 | 68% | 66-71% | 1428           | 1055 | 73% | 70-76% | 478             | 255 | 57% | 51-62%  | **       |
| Men reporting to have ever had a Prostate Specific Antigen test (African American men age 45-49 years and all men age $\geq$ 50 years) | 520           | 420  | 79% | 75-83% | 614            | 487  | 75% | 70-79% | 179             | 108 | 62% | 52-71%  | **       |
| Men reporting to have ever had a digital rectal examination (African American men age 45-49 years and all men age $\geq$ 50 years)     | 550           | 491  | 89% | 85-92% | 659            | 606  | 91% | 88-94% | 196             | 162 | 82% | 75-89%  | **       |
| Women reporting to have ever had a mammogram (Age $\geq$ 40 years)                                                                     | 1771          | 1681 | 94% | 93-96% | 977            | 939  | 96% | 95-98% | 468             | 413 | 87% | 82-91%  | **       |
| Women reporting to have ever had a Pap test (Age $\geq$ 40 years with an intact uterus)                                                | 1167          | 1146 | 98% | 97-99% | 647            | 632  | 98% | 96-99% | 317             | 310 | 98% | 96-100% | ^        |
| Persons reporting to have ever had oral cancer screening (Age $\geq$ 40 years)                                                         | 2458          | 1233 | 49% | 46-51% | 1668           | 857  | 50% | 47-53% | 747             | 302 | 36% | 32-40%  | **       |

\*\* p-value  $\leq$  0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 9-7. ALCOHOL CONSUMPTION DURING THE PAST 30 DAYS BY DEMOGRAPHIC FACTORS,  
AMONG RESPONDENTS AGE 40 YEARS AND OLDER**

|                                |          | Non-drinkers |             |               | Low-risk drinkers * |             |               | High-risk drinkers~ |             |               |                 |
|--------------------------------|----------|--------------|-------------|---------------|---------------------|-------------|---------------|---------------------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b>     | <b>wt %</b> | <b>95% CI</b> | <b>n</b>            | <b>wt %</b> | <b>95% CI</b> | <b>n</b>            | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Total Population</b>        | 5080     | 2342         | 44%         | 42-46%        | 2227                | 45%         | 43-47%        | 511                 | 11%         | 10-12%        |                 |
| <b>Area of Residence</b>       |          |              |             |               |                     |             |               |                     |             |               | <b>**</b>       |
| Urban                          | 3026     | 1305         | 43%         | 41-45%        | 1428                | 46%         | 44-49%        | 293                 | 11%         | 9-12%         |                 |
| Rural                          | 2054     | 1037         | 48%         | 46-51%        | 799                 | 39%         | 37-42%        | 218                 | 13%         | 11-15%        |                 |
| <b>Gender</b>                  |          |              |             |               |                     |             |               |                     |             |               | <b>**</b>       |
| Male                           | 1887     | 719          | 38%         | 35-41%        | 883                 | 46%         | 43-49%        | 285                 | 16%         | 14-18%        |                 |
| Female                         | 3193     | 1623         | 49%         | 47-51%        | 1344                | 44%         | 42-46%        | 226                 | 7%          | 6-8%          |                 |
| <b>Age</b>                     |          |              |             |               |                     |             |               |                     |             |               | <b>**</b>       |
| 40-49 years                    | 1357     | 512          | 38%         | 35-42%        | 648                 | 47%         | 44-50%        | 197                 | 15%         | 12-17%        |                 |
| 50-64 years                    | 2052     | 884          | 42%         | 39-45%        | 954                 | 47%         | 45-50%        | 214                 | 11%         | 9-12%         |                 |
| 65 years and above             | 1671     | 946          | 56%         | 53-59%        | 625                 | 38%         | 35-41%        | 100                 | 6%          | 5-8%          |                 |
| <b>Race</b>                    |          |              |             |               |                     |             |               |                     |             |               | <b>**</b>       |
| White                          | 4064     | 1715         | 38%         | 36-40%        | 1907                | 50%         | 48-52%        | 442                 | 12%         | 11-13%        |                 |
| African American or Black      | 828      | 518          | 59%         | 55-63%        | 255                 | 32%         | 28-36%        | 55                  | 8%          | 6-11%         |                 |
| Other                          | 188      | 109          | 52%         | 43-61%        | 65                  | 40%         | 32-49%        | 14                  | 8%          | 3-13%         |                 |
| <b>Gender and Race</b>         |          |              |             |               |                     |             |               |                     |             |               | <b>**</b>       |
| White male                     | 1575     | 555          | 33%         | 30-36%        | 777                 | 51%         | 48-54%        | 243                 | 16%         | 14-19%        |                 |
| African American male          | 240      | 134          | 55%         | 47-62%        | 75                  | 31%         | 24-38%        | 31                  | 14%         | 9-19%         |                 |
| Other male                     | 72       | 30           | 34%         | 21-48%        | 31                  | 51%         | 36-65%        | 11                  | 15%         | 4-25%         |                 |
| White female                   | 2489     | 1160         | 43%         | 40-45%        | 1130                | 49%         | 47-51%        | 199                 | 8%          | 7-10%         |                 |
| African American female        | 588      | 384          | 63%         | 58-67%        | 180                 | 33%         | 29-38%        | 24                  | 4%          | 2-6%          |                 |
| Other female                   | 116      | 79           | 66%         | 56-76%        | 34                  | 32%         | 22-41%        | 3                   | 2%          | 0-5%          |                 |

\* Men  $\leq 14$  drinks/week or  $< 5$  drinks/occasion  
Females  $\leq 7$  drinks/week or  $< 4$  drinks/occasion.

~ High-risk drinking exceeds these criteria.

\*\* p-value  $\leq 0.05$

\* p-value  $> 0.05 - 0.1$

^ p-value  $> 0.1$

**TABLE 9-7. ALCOHOL CONSUMPTION DURING THE PAST 30 DAYS BY DEMOGRAPHIC FACTORS,  
AMONG RESPONDENTS AGE 40 YEARS AND OLDER**

|                                        |          | Non-drinkers |             |               | Low-risk drinkers * |             |               | High-risk drinkers~ |             |               |                 |
|----------------------------------------|----------|--------------|-------------|---------------|---------------------|-------------|---------------|---------------------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b> | <b>n</b>     | <b>wt %</b> | <b>95% CI</b> | <b>n</b>            | <b>wt %</b> | <b>95% CI</b> | <b>n</b>            | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Marital Status</b>                  |          |              |             |               |                     |             |               |                     |             |               | <b>**</b>       |
| Married or partner of unmarried couple | 3036     | 1228         | 40%         | 38-42%        | 1487                | 49%         | 46-51%        | 321                 | 11%         | 10-13%        |                 |
| Divorced or separated                  | 874      | 428          | 48%         | 44-53%        | 358                 | 42%         | 37-46%        | 88                  | 10%         | 8-12%         |                 |
| Widowed                                | 757      | 480          | 66%         | 61-70%        | 231                 | 29%         | 25-33%        | 46                  | 6%          | 4-8%          |                 |
| Never married                          | 399      | 200          | 48%         | 41-54%        | 144                 | 37%         | 31-43%        | 55                  | 15%         | 11-20%        |                 |
| <b>Education</b>                       |          |              |             |               |                     |             |               |                     |             |               | <b>**</b>       |
| Less than high school                  | 403      | 304          | 70%         | 64-76%        | 65                  | 20%         | 14-25%        | 34                  | 10%         | 6-15%         |                 |
| High school grad or GED                | 1404     | 834          | 58%         | 55-61%        | 433                 | 32%         | 29-35%        | 137                 | 10%         | 8-12%         |                 |
| College 1-3 years                      | 1222     | 577          | 46%         | 43-50%        | 528                 | 43%         | 39-46%        | 117                 | 11%         | 8-13%         |                 |
| College grad                           | 1093     | 357          | 33%         | 29-36%        | 612                 | 55%         | 51-59%        | 124                 | 12%         | 10-15%        |                 |
| Advanced degree                        | 946      | 262          | 26%         | 23-30%        | 585                 | 63%         | 59-66%        | 99                  | 11%         | 9-14%         |                 |
| <b>Employment Status</b>               |          |              |             |               |                     |             |               |                     |             |               | <b>**</b>       |
| Employed for wages                     | 2275     | 870          | 37%         | 35-39%        | 1129                | 50%         | 47-53%        | 276                 | 13%         | 11-15%        |                 |
| Self-employed                          | 430      | 152          | 34%         | 28-39%        | 212                 | 50%         | 45-56%        | 66                  | 16%         | 12-20%        |                 |
| Retired                                | 1699     | 926          | 54%         | 51-57%        | 668                 | 39%         | 37-42%        | 105                 | 7%          | 5-8%          |                 |
| Other                                  | 661      | 386          | 58%         | 53-63%        | 211                 | 33%         | 29-38%        | 64                  | 9%          | 6-12%         |                 |
| <b>Household Income</b>                |          |              |             |               |                     |             |               |                     |             |               | <b>**</b>       |
| <\$25,000                              | 858      | 588          | 67%         | 63-72%        | 204                 | 25%         | 21-29%        | 66                  | 8%          | 6-10%         |                 |
| \$25,000-<\$35,000                     | 446      | 251          | 55%         | 49-61%        | 156                 | 37%         | 31-42%        | 39                  | 8%          | 5-11%         |                 |
| \$35,000-<\$50,000                     | 613      | 284          | 48%         | 44-53%        | 267                 | 40%         | 35-45%        | 62                  | 11%         | 8-15%         |                 |
| \$50,000-<\$75,000                     | 740      | 319          | 43%         | 39-47%        | 340                 | 45%         | 41-50%        | 81                  | 12%         | 9-15%         |                 |
| \$75,000 or greater                    | 1669     | 484          | 29%         | 26-31%        | 973                 | 58%         | 55-61%        | 212                 | 13%         | 11-15%        |                 |
| Don't know/not sure                    | 310      | 210          | 67%         | 61-74%        | 83                  | 27%         | 21-33%        | 17                  | 6%          | 3-9%          |                 |
| Refused                                | 444      | 206          | 44%         | 37-51%        | 204                 | 44%         | 38-51%        | 34                  | 12%         | 7-16%         |                 |

\* Men  $\leq 14$  drinks/week or  $< 5$  drinks/occasion  
 Females  $\leq 7$  drinks/week or  $< 4$  drinks/occasion.

~ High-risk drinking exceeds these criteria.

\*\* p-value  $\leq 0.05$

\* p-value  $> 0.05 - 0.1$

^ p-value  $> 0.1$

**TABLE 9-8. CANCER SCREENING PRACTICES BY RISK LEVEL OF ALCOHOL CONSUMPTION DURING THE PAST 30 DAYS,  
AMONG RESPONDENTS AGE 40 YEARS AND OLDER**

|                                                                                                                                      | Non-drinkers |      |     |        | Low-risk drinkers * |      |     |         | High-risk drinkers~ |     |      |         |          |
|--------------------------------------------------------------------------------------------------------------------------------------|--------------|------|-----|--------|---------------------|------|-----|---------|---------------------|-----|------|---------|----------|
| Screening Test                                                                                                                       | N            | n    | wt% | 95%CI  | N                   | n    | wt% | 95%CI   | N                   | n   | wt%  | 95%CI   | Stat Sig |
| Persons reporting to have ever had a fecal occult blood test<br>(Age ≥ 50 years)                                                     | 1813         | 1005 | 55% | 52-58% | 1563                | 948  | 60% | 57-63%  | 314                 | 168 | 55%  | 48-62%  | *        |
| Persons reporting to have ever had a sigmoidoscopy or colonoscopy<br>(Age ≥ 50 years)                                                | 1808         | 1176 | 65% | 63-68% | 1575                | 1164 | 73% | 70-75%  | 313                 | 207 | 65%  | 58-72%  | **       |
| Men reporting to have ever had a Prostate Specific Antigen test<br>(African American men age 40-49 years and all men age ≥ 50 years) | 514          | 385  | 73% | 68-78% | 620                 | 506  | 78% | 73-82%  | 171                 | 117 | 67%  | 58-76%  | *        |
| Men reporting to have ever had a digital rectal examination<br>(African American men age 40-49 years and all men age > 50 years)     | 558          | 481  | 85% | 81-89% | 664                 | 621  | 93% | 91-96%  | 175                 | 150 | 83%  | 76-91%  | **       |
| Women reporting to have ever had a mammogram<br>(Age ≥ 40 years)                                                                     | 1621         | 1514 | 94% | 92-95% | 1344                | 1280 | 94% | 92-96%  | 226                 | 215 | 93%  | 89-98%  | ^        |
| Women reporting to have ever had a Pap test<br>(Age ≥ 40 years with an intact uterus)                                                | 991          | 958  | 97% | 95-98% | 971                 | 963  | 99% | 98-100% | 160                 | 159 | 100% | 99-100% | **       |
| Persons reporting to have ever had oral cancer screening<br>(Age ≥ 40 years)                                                         | 2228         | 905  | 39% | 36-41% | 2114                | 1224 | 55% | 53-58%  | 493                 | 250 | 48%  | 43-54%  | **       |

\* Men ≤14 drinks/week or < 5 drinks/occasion  
 Females ≤7 drinks/week or <4 drinks/occasion  
 ~ High-risk drinking exceeds these criteria.

\*\* p-value ≤ 0.05

\* p-value >0.05 - 0.1

^ p-value > 0.1

## Chapter 10. Weight, Dietary Practices, and Physical Activity

Overweight and obesity are major health concerns in the United States (U.S.). Scientific evidence has established clear associations between overweight/obesity and the leading causes of morbidity and mortality in the U.S., including cardiovascular disease, cancer, and diabetes.<sup>1</sup> Overweight and obesity are clearly associated with increased risk of developing cancer of the breast (in postmenopausal women), colon, endometrium, esophagus, and kidney. Highly suggestive evidence also indicates that obesity increases risk for cancers of the gallbladder, prostate, ovary, pancreas, thyroid, and cervix, and for multiple myeloma and Hodgkin lymphoma.<sup>2</sup> One recent study estimates that in the U.S., overweight and obesity could account for as much as 14% of cancer deaths in men and 20% of all cancer-related deaths in women.<sup>3</sup>

Aside from tobacco use, body weight, dietary practices, and levels of physical activity are the most important determinants of cancer risk. Because of their critical importance in overall health, these factors are leading health indicators used by HP 2010 to measure the health of the nation. The MCS examines these indicators through a series of questions related to body weight and height, fruit and vegetable consumption, meat consumption (as an indicator of saturated fat intake), and frequency and intensity of physical activity. Findings were used to assess the prevalence of risk factors among respondents, and to examine whether body mass index (BMI), dietary practices, and physical activity levels are associated with cancer screening behaviors.

### 10.1 Body Mass Index

BMI is widely used as an indicator of total body fat, based on an individual's height and weight. BMI is calculated as body weight in kilograms divided by height in meters, squared ( $\text{kg/m}^2$ ). The table below shows the BMI ranges generally used as a measure of whether an individual is underweight, at a healthy weight, overweight, or obese.

|             | <b>BMI range (<math>\text{kg/m}^2</math>)</b> |
|-------------|-----------------------------------------------|
| Underweight | Less than 18.5                                |
| Healthy     | 18.5 – 24.9                                   |
| Overweight  | 25.0 – 29.9                                   |
| Obese       | 30.0 or higher                                |

Reducing the percentage of Americans who are overweight or obese is among the leading health indicators used by HP 2010. One specific HP 2010 target is to reduce the proportion of American adults age 20 years and older who are obese, from a national baseline of 23% to 15%.

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<sup>1</sup> Eyre H, Kahn R, and Robertson RM. Preventing cancer, cardiovascular disease, and diabetes. *Diabetes Care* 2004; 27(7): 1812-1824.

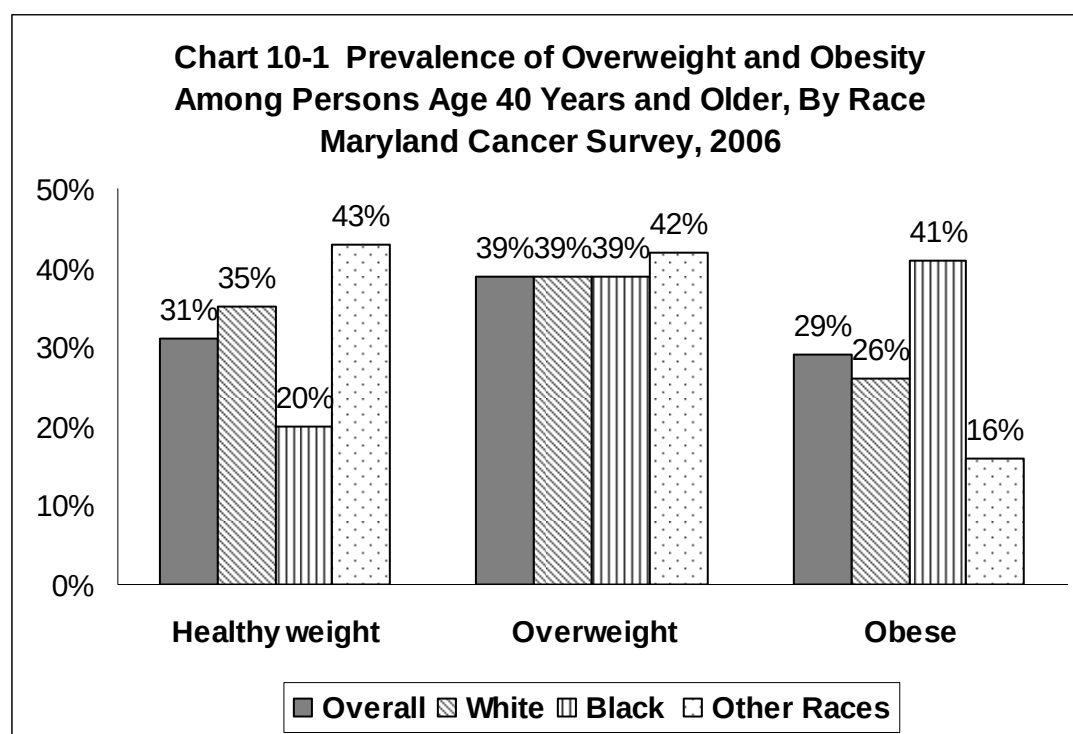
<sup>2</sup> Kushi LH et al. American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention: Reducing the Risk of Cancer with Healthy Food Choices and Physical Activity. *CA Cancer J Clin* 2006; 56:254-281.

<sup>3</sup> Calle EE et al. Overweight, obesity, and mortality from cancer in a prospectively studies cohort of U.S. adults. *N Engl J Med* 2003; 348:1625-1638.

Another HP 2010 target is to increase the proportion of adults age 20 years and older that has a healthy weight, from a national baseline of 42% to 60%.<sup>4</sup>

In the MCS, participants were asked to provide their height and weight, which was then used to estimate BMI. The following is a summary of BMI distribution among Marylanders age 40 years and older, based on results of the MCS (Table 10-1 and Chart 10-1).

- Thirty-one percent (31%) of Marylanders age 40 years and older had a BMI in the healthy range, 39% had a BMI in the overweight range and 29% had a BMI in the obese range. (Fifty-nine persons with a BMI in the “underweight” range were excluded from analysis due to small sample size, as were the 145 who did not report a height and/or weight.)
- More than two-thirds (68%) of Marylanders age 40 years and older can be considered as overweight or obese.



BMI differed significantly among respondents, based on several demographic characteristics (Table 10-1).

- A lower percentage of men than women had a BMI in the healthy weight range (24% vs. 38%, respectively). Although the prevalence of overweight was significantly higher among men, 47% compared to 32% for women; the prevalence of obesity was comparable for men and women (29% vs. 30%).

<sup>4</sup> U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. Understanding and Improving Health; Objectives for Improving Health. Vol. II, Nutrition and Overweight. Washington, DC: U.S. Government Printing Office, November 2000. Available at <http://www.healthypeople.gov/document/HTML/Volume2/19Nutrition.htm>. Last accessed January 23, 2007.

- The proportion of respondents with a BMI in the healthy range was significantly lower among respondents age 50 to 64 years compared with other age groups.
- African Americans had a significantly greater percentage with a BMI in the obese range than did either Whites or those of other races (41%, 26%, and 16%, respectively). Among all race-sex categories, African American females had the highest proportion of obesity (45%).
- Education appears to be strongly associated with BMI in Marylanders age 40 years and older. As level of education increased, the proportion of respondents who were obese decreased. The prevalence of obesity is highest among those with less than a high school education (40%) and lowest among those with an advanced degree (19%). The proportion of respondents in the healthy BMI range increased with higher levels of education.
- As household income increased, the proportion of persons in the healthy BMI range generally increased while the prevalence of obesity decreased.

MCS participants were asked whether, at the time of the survey, they were trying to either lose weight or keep from gaining weight, and if so, what method they were using. Among all respondents age 40 and older:

- Forty-nine percent (49%) said they are trying to lose weight (Table 10-2).
- Twenty-four percent (24%) said that in the past 12 months, a health professional had advised them to lose weight (data not shown in tables). Of those with a BMI in the obese range, 52% reported that a health professional had advised them to lose weight.

Among respondents who said they were trying to lose weight or keep from gaining weight:

- The most common approach was eating fewer calories and less fat (37%; data not shown in tables).
- Seventeen percent (17%) said they were following a particular diet plan (Table 10-2).
- Of those who reported using a diet plan, the one most commonly cited was Weight Watchers. (Data not shown in tables.)
- Almost three-fourths (67%) said they were using physical activity or exercise in their weight control efforts.

## 10.2 Dietary Practices

Epidemiological studies have shown that eating a diet high in vegetables and fruits and low in animal fat and meat reduces the risk of some of the most common types of cancer.<sup>1,2</sup> Although questions remain about the role of nutrition in cancer, current recommendations for overall health are to consume a diet that includes at least five servings of vegetables and fruits each day, to choose whole grain foods, and to limit consumption of saturated fats, alcohol, and excess calories.<sup>5</sup>

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<sup>5</sup> U.S. Department of Health and Human Services (HHS) and U.S. Department of Agriculture (USDA). Dietary Guidelines for Americans 2005. Available at <http://www.healthierus.gov/dietaryguidelines>. Last accessed January 25, 2007.



### Fruit and Vegetable Consumption

Two HP 2010 objectives concern the consumption of fruits and vegetables in the American population age 2 years and older:

1. To increase the proportion of persons age 2 years and older who consume at least two daily servings of fruit from a national baseline of 28% to 75%; and
2. To increase the proportion of those who consume at least three daily servings of vegetables from 3% to 50%.<sup>4</sup>

In the MCS 2006, Marylanders were asked about their average daily consumption of a variety of fruits and vegetables. Using these survey results, we estimated the number of daily servings of fruits and vegetables by summing the responses from specific questions about consumption of fruits, fruit juice, leafy salad greens, and vegetables (other than potatoes). The results show that Marylanders do not yet meet the HP 2010 targets for either fruit or vegetable consumption. Only 60% of Marylanders reported eating 2 or more servings of fruit (compared to HP 2010 target of 75%) and only 27% reported that they consume 3 or more daily servings of vegetables (compared to target of 50%).

The benefits of the HP 2010 objectives are encompassed in the goal of the Centers for Disease Control and Prevention (CDC) National 5-A-Day for Better Health Program, namely to increase the consumption of fruits and vegetables in the U.S. to five to nine servings every day. This program strives to inform Americans that eating fruits and vegetables can improve their health and reduce the risk of cancer and various cardiovascular diseases.<sup>6</sup> Table 10-3 presents the findings for respondents eating at least five servings of fruits and vegetables daily.

- Overall, approximately 38% of Marylanders age 40 years and older reported eating five or more servings of fruits and vegetables per day.
- The proportion of respondents who reported consuming five or more servings of fruits and/or vegetables per day (“five-a-day”) differed significantly with respect to several demographic characteristics (Table 10-3).
- More women reported eating five-a-day than did men (44% vs. 30%, respectively).
- As education level increased, so did adherence to the five-a-day recommendation, ranging from 25% of those with less than high school education to 46% of those possessing an advanced degree.
- The proportion of respondents eating five-a-day was somewhat lower among those with annual household income less than \$50,000 (33-34%) compared to respondents with incomes of \$50,000 or more (39-40%).
- Marylanders with a BMI in the healthy range were significantly more likely to consume at least five daily servings of fruits and/or vegetables than persons who were overweight or obese (43% compared to 37% of overweight respondents and 33% of those classified as obese).
- Adherence to the five-a-day recommendation did not differ significantly by age, race, or employment status.

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<sup>6</sup> CDC. National 5-A-Day for Better Health Program. Available at <http://www.5aday.gov>. Last accessed January 25, 2007.

## Red Meat Consumption

One of the primary dietary concerns in the U.S. is consuming too much saturated fat and total fat. Cheese and beef are the leading sources of saturated fat in the American diet, comprising almost one-fourth of total saturated fat consumed.<sup>5</sup> Large amounts of saturated fat in the diet contribute to the risk of heart disease, and high levels of meat consumption could increase the risk of cancer of the colon and rectum,<sup>7, 8</sup> stomach,<sup>9</sup> and pancreas.<sup>10, 11</sup> Both the *Dietary Guidelines for Americans*<sup>5</sup> and the National Cholesterol Education Program<sup>12</sup> recommend a diet that contains less than 10% of calories from saturated fat and no more than 30% of calories from total fat. A related goal of the HP 2010 initiative is to increase the proportion of persons age 2 years and older who consume less than 10 percent of calories from saturated fat.<sup>4</sup>

As an indicator of saturated fat intake, MCS participants were asked about their frequency of meat consumption (such as beef, pork, lamb or veal, but excluding seafood and poultry) on a weekly basis (Table 10-4).

- Overall, 21% of Marylanders age 40 years and older eat one or fewer servings of meat a week; 49% eat two to six servings of meat per week; and 30% report eating seven or more servings of meat weekly.
- Respondents living in rural areas reported eating meat more frequently than persons living in urban areas.
- A higher proportion of men reported eating seven or more servings of meat per week (34%) compared to women (26%); a higher proportion of women ate one or fewer servings of meat a week (25%) compared to men (17%).
- Almost one-third (30%) of non-White respondents (African Americans and persons of other races) reported the lowest meat consumption (one or fewer servings of meat per week), compared to only 17% of White respondents.
- The highest levels of meat consumption (at least seven servings weekly) were inversely associated with years of education and with annual household income. That is, as education level and income increased, the proportion of respondents reporting meat consumption at this highest level generally decreased.
- A higher proportion of respondents in the obese weight range (34%) reported eating seven or more servings of meat a week compared to those who are overweight (30%) or healthy weight (26%). A higher proportion of respondents in the healthy weight range reported eating meat one or fewer times per week (24%) compared to those who are overweight (20%) or obese (19%).

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<sup>7</sup> Chao A, Thun MJ et al. Meat consumption and risk of colorectal cancer. *JAMA* 2005; 293(2): 172-82.

<sup>8</sup> Larson S, Wolk A. Meat consumption and risk of colorectal cancer: A meta-analysis of prospective studies. *Int J Cancer* 2006; 119(11):2657-2664.

<sup>9</sup> Gonzalez CA et al. Meat intake and risk of stomach and esophageal adenocarcinoma within the European Prospective Investigation Into Cancer and Nutrition (EPIC). *J Natl Cancer Inst.* 2006; 98(5):345-54.

<sup>10</sup> Tavani A, La Vecchia C. et al. Red meat intake and cancer risk: a study in Italy. *International Journal of Cancer* 2000; 86(3):425-8.

<sup>11</sup> Nothlings U, Wilkens LR et al. Meat and fat intake as risk factors for pancreatic cancer: the multiethnic cohort study. *J Natl Cancer Inst.* 2005; 97(19): 1458-65.

<sup>12</sup> National Institutes of Health. National Cholesterol Education Program. Available at <http://www.nhlbi.nih.gov/guidelines/cholesterol> . Last accessed January 25, 2007.

### 10.3 Physical Activity

In addition to known benefits in reducing cardiovascular disease risk, physical activity may also reduce the risk of developing several types of cancer, including cancer of the breast,<sup>13</sup> colon,<sup>15, 16, 17</sup> prostate (aggressive cancer),<sup>18</sup> and endometrium.<sup>19</sup> Physical activity is one of the leading health indicators used by HP 2010. Two related HP 2010 goals are:

1. To increase the proportion of adults 18 years and older who engage in moderate physical activity for at least 30 minutes per day 5 or more days per week or vigorous physical activity for at least 20 minutes per day, 3 or more days per week to a target of 50%<sup>20</sup>; and
2. To increase the proportion of adults who engage in vigorous physical activity three or more days per week for at least 20 minutes per occasion to a target of 30%.<sup>20</sup>

#### Moderate Physical Activity

Moderate physical activity causes small increases in breathing and/or heart rate (e.g., brisk walking, bicycling, vacuuming, gardening). MCS participants were asked about the frequency and duration of their moderate physical activity in a typical week (Table 10-5).

- Approximately one-third of all respondents (34%) reported little or no moderate physical activity (do **not** engage in at least 30 minutes of moderate physical activity at least one day a week).
- Eight percent (8%) of respondents reported doing 30 minutes or more of moderate physical activity 1-2 days per week.
- Almost one-fourth (24%) reported doing 30 minutes or more of moderate physical activity 3-4 days per week.
- One in three respondents (33%) reported doing at least 30 minutes of moderate activity 5-7 days per week, exceeding the HP 2010 target of 30% for all adults 18 years and older.
- Respondents over the age of 64 years tended to do less moderate physical activity than those in younger age groups.

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<sup>13</sup> McTiernan A. et al. Recreational physical activity and the risk of breast cancer in postmenopausal women: The Women's Health Initiative Cohort Study. *JAMA* 2003; 290(10): 1331-6.

<sup>14</sup> Patel AV et al. Recreational physical activity and risk of postmenopausal breast cancer in a large cohort of US women. *Cancer Causes Control*. 2003; 14(6):519-529.

<sup>15</sup> Samad AK et al. A meta-analysis of the association of physical activity with reduced risk of colorectal cancer. *Colorectal Dis*. 2005; 7(3): 204-13.

<sup>16</sup> Martinez ME et al. Leisure-time physical activity, body size, and colon cancer in women. *Nurses' Health Study Research Group. J Natl Cancer Inst* 1997; 89:948-955.

<sup>17</sup> Colditz GA et al. Physical activity and reduced risk of colon cancer: implications for prevention. *Cancer Causes Control* 1997; 8:649-667.

<sup>18</sup> Patel AV et al. Recreational physical activity and risk of prostate cancer in a large cohort of US men. *Cancer Epidemiol Biomarkers Prev* 2005; 14(1):275-9.

<sup>19</sup> Friberg E et al. Physical activity and risk of endometrial cancer: a population-based prospective cohort study. *Cancer Epidemiol Biomarkers Prev* 2006; 15(11): OF1-5.

<sup>20</sup> Healthy People 2010, Midcourse review. Available at <http://www.healthypeople.gov/data/midcourse/default.htm#pubs>. Last accessed April 2, 2007.

- The frequency of moderate physical activity generally increased with increasing education level. Conversely, the likelihood of being sedentary (not engaging in moderate activity at least once a week) decreased with increasing education level.
- Respondents with an annual household income less than \$25,000 were more likely to be sedentary than those with higher household incomes.

### Vigorous Physical Activity

MCS participants were asked about the frequency and duration of vigorous physical activity (non-occupational), such as running, aerobics, heavy yard work, or other activities that cause large increases in breathing or heart rate (Table 10-6). Among MCS respondents age 40 and older:

- Almost one-fourth (24%) reported they engage in vigorous physical activity at least three days per week for 20 minutes or more.

The percentage of respondents reporting that they engaged in vigorous physical activity at least 3 days per week differed significantly by almost all the demographic characteristics under consideration, except area of residence.

- More men than women reported vigorous activity (27% vs. 22%).
- The proportion of those engaging in vigorous physical activity decreased significantly with age, dropping from 32% of those age 40 to 49 years to 15% of those age 65 years and older.
- There was a strong positive association between vigorous activity and education level (i.e., as education level increased, the percentage of respondents who engage in regular vigorous activity also increased).
- The proportion of respondents engaging in regular vigorous activity increased significantly with increasing levels of household income.

Responses to the questions about moderate and vigorous physical activity were combined to achieve an overall picture of activity performed (Table 10-7).

- Almost half (46%) of Marylanders age 40 years and older engage in regular physical activity--either 20 minutes of vigorous physical activity 3 or more days per week or 30 minutes of moderate physical activity 5 or more days a week.
- The higher proportions of respondents achieving these activity levels were found among the youngest age group (40 to 49 years), Whites, those with at least a college degree, employed persons, and those with household incomes of \$50,000 or more.
- People who were age 65 and older, African American (compared to Whites), widowed, had less than a high school education, retired, or in the lowest income level had the lowest prevalence of achieving these levels of physical activity.

Respondents who did not engage in either 20 minutes of vigorous activity 3 or more days per week or at least 30 minutes of moderate physical activity 5 or more days per week were asked the reason *why* they were not physically active. (Data not shown in tables.)

- 30% reported a physical disability or other health limitation
- 29% reported a lack of motivation
- 32% reported a lack of time

- Other miscellaneous reasons were reported less frequently, including the perception that the respondent is already getting sufficient physical activity during his or her daily routine.

One objective of HP 2010 is to increase the proportion of people who have been counseled by a physician in the past year about physical activity or exercise, from a 2001 baseline of 45% to a target of 54%.<sup>21</sup> All MCS participants were asked whether, in the past year, a doctor or other health care professional had recommended that they begin or continue to do exercise or physical activity (Table 10-8).

- Almost half (46%) of respondents said that exercise/activity had been recommended to them.
- Those receiving such recommendations in highest proportions included urban respondents, women, persons age 50 years and older, non-Whites, those with at least a high school education, and persons in higher income groups.

#### **10.4 Cancer Screening Practices by BMI, Dietary Practices, and Physical Activity**

Undergoing or performing cancer screening tests can be thought of as a healthy behavior, much like engaging in physical activity or eating a balanced diet. Physical activity, diet, and BMI were examined in relation to each of the cancer screening questions to see whether people who practice other healthy behaviors are also more likely to undergo cancer screening (Table 10-9).

##### Physical Activity and Cancer Screening

For each type of cancer screening, the prevalence of ever being screened was examined for respondents who engage in regular physical activity (vigorous and moderate levels) compared to those who do not.

- Only in the case of oral cancer screening was the prevalence of screening significantly different between those who engaged in vigorous physical activity and those who did not. Fifty-two percent (52%) of persons who said they got regular vigorous exercise reported ever having oral cancer screening, compared to 45% of respondents who did not engage in vigorous exercise.
- Those who did not engage in moderate physical activity, even one day a week, had a significantly lower prevalence of ever having an FOBT.

##### Dietary Practices and Cancer Screening

Dietary practices, specifically the number of servings of fruit, vegetables, and meat consumed, were associated with whether a respondent was ever screened for most types of cancer addressed in the survey.

- For all types of cancer screening except Pap testing for cervical cancer, there was a direct relationship between the daily number of servings of fruits and vegetables and the percentage of respondents who had ever been screened. Respondents who ate at

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<sup>21</sup> U.S. Department of Health and Human Services. Healthy People 2010, Midcourse review. Available at <http://www.healthypeople.gov/data/midcourse/html/focusareas/FA01Objectives.htm>. Last accessed July 6, 2007.

- least three servings of fruits and vegetables per day had a significantly higher prevalence of ever being screened compared to those who ate fewer servings.
- Compared with respondents who reported eating seven or more servings of red meat per week, those who ate two to six servings had a significantly higher prevalence of ever having CRC screening, a PSA test, or oral cancer screening.

#### Body Mass Index and Cancer Screening

- Respondents who had a BMI in the healthy range had the highest prevalence (54%) of ever having an oral cancer screening.
- A significantly higher percentage of overweight respondents reported ever having an FOBT (61%), compared with respondents who had a BMI in the healthy range (55%).
- Men who were categorized as obese had a significantly higher prevalence of ever having a DRE (92%) compared to healthy weight men (87%).

**TABLE 10-1. BODY MASS INDEX BY DEMOGRAPHIC CHARACTERISTICS, AMONG RESPONDENTS AGE 40 YEARS AND OLDER ~**

|                                |          | <b>Healthy Weight<br/>(BMI 18.5 - 24.9)</b> |             |               | <b>Overweight<br/>(BMI 25.0 - 29.9)</b> |             |               | <b>Obese<br/>(BMI ≥ 30.0)</b> |             |               |                 |
|--------------------------------|----------|---------------------------------------------|-------------|---------------|-----------------------------------------|-------------|---------------|-------------------------------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b>                                    | <b>wt %</b> | <b>95% CI</b> | <b>n</b>                                | <b>wt %</b> | <b>95% CI</b> | <b>n</b>                      | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| Total Population               | 4945     | 1651                                        | 31%         | 30-33%        | 1850                                    | 39%         | 38-41%        | 1444                          | 29%         | 28-31%        |                 |
| <b>Area of Residence</b>       |          |                                             |             |               |                                         |             |               |                               |             |               | <b>^</b>        |
| Urban                          | 2926     | 983                                         | 31%         | 29-33%        | 1123                                    | 40%         | 38-42%        | 820                           | 29%         | 27-31%        |                 |
| Rural                          | 2019     | 668                                         | 31%         | 29-34%        | 727                                     | 37%         | 35-40%        | 625                           | 31%         | 29-34%        |                 |
| <b>Gender</b>                  |          |                                             |             |               |                                         |             |               |                               |             |               | <b>**</b>       |
| Male                           | 1892     | 487                                         | 24%         | 22-27%        | 869                                     | 47%         | 44-50%        | 536                           | 29%         | 26-31%        |                 |
| Female                         | 3053     | 1164                                        | 38%         | 36-40%        | 981                                     | 32%         | 30-34%        | 908                           | 30%         | 28-32%        |                 |
| <b>Age</b>                     |          |                                             |             |               |                                         |             |               |                               |             |               | <b>**</b>       |
| 40-49 years                    | 1319     | 484                                         | 34%         | 31-37%        | 467                                     | 38%         | 34-41%        | 368                           | 29%         | 26-32%        |                 |
| 50-64 years                    | 2003     | 598                                         | 28%         | 26-30%        | 736                                     | 40%         | 37-43%        | 669                           | 32%         | 30-34%        |                 |
| 65 years and above             | 1623     | 569                                         | 32%         | 30-35%        | 647                                     | 41%         | 38-44%        | 407                           | 27%         | 24-30%        |                 |
| <b>Race</b>                    |          |                                             |             |               |                                         |             |               |                               |             |               | <b>**</b>       |
| White                          | 3960     | 1422                                        | 35%         | 33-36%        | 1481                                    | 39%         | 37-41%        | 1057                          | 26%         | 25-28%        |                 |
| African American or Black      | 803      | 155                                         | 20%         | 17-23%        | 299                                     | 39%         | 35-43%        | 349                           | 41%         | 37-45%        |                 |
| Other                          | 182      | 74                                          | 43%         | 34-51%        | 70                                      | 42%         | 33-51%        | 38                            | 16%         | 10-21%        |                 |
| <b>Gender and Race</b>         |          |                                             |             |               |                                         |             |               |                               |             |               | <b>**</b>       |
| White male                     | 1586     | 411                                         | 24%         | 22-27%        | 733                                     | 48%         | 45-50%        | 442                           | 28%         | 25-31%        |                 |
| African American male          | 235      | 52                                          | 22%         | 16-28%        | 99                                      | 43%         | 36-51%        | 84                            | 34%         | 27-41%        |                 |
| Other male                     | 71       | 24                                          | 33%         | 20-47%        | 37                                      | 57%         | 43-72%        | 10                            | 9%          | 2-17%         |                 |
| White female                   | 2374     | 1011                                        | 44%         | 42-47%        | 748                                     | 31%         | 29-33%        | 615                           | 25%         | 23-27%        |                 |
| African American female        | 568      | 103                                         | 18%         | 15-22%        | 200                                     | 36%         | 32-41%        | 265                           | 45%         | 41-50%        |                 |
| Other female                   | 111      | 50                                          | 50%         | 40-61%        | 33                                      | 29%         | 19-38%        | 28                            | 21%         | 13-29%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 10-1. BODY MASS INDEX BY DEMOGRAPHIC CHARACTERISTICS, AMONG RESPONDENTS AGE 40 YEARS AND OLDER ~**

|                                           |          | Healthy Weight<br>(BMI 18.5 - 24.9) |             |               | Overweight<br>(BMI 25.0 - 29.9) |             |               | Obese<br>(BMI ≥ 30.0) |             |               |                 |
|-------------------------------------------|----------|-------------------------------------|-------------|---------------|---------------------------------|-------------|---------------|-----------------------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>            | <b>N</b> | <b>n</b>                            | <b>wt %</b> | <b>95% CI</b> | <b>n</b>                        | <b>wt %</b> | <b>95% CI</b> | <b>n</b>              | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Marital Status</b>                     |          |                                     |             |               |                                 |             |               |                       |             |               | <b>**</b>       |
| Married or partner of<br>unmarried couple | 2949     | 990                                 | 32%         | 30-34%        | 1159                            | 41%         | 39-43%        | 800                   | 27%         | 25-29%        |                 |
| Divorced or separated                     | 864      | 283                                 | 29%         | 26-33%        | 298                             | 35%         | 31-39%        | 283                   | 35%         | 31-39%        |                 |
| Widowed                                   | 741      | 269                                 | 35%         | 31-39%        | 257                             | 34%         | 30-38%        | 215                   | 31%         | 27-35%        |                 |
| Never married                             | 379      | 104                                 | 25%         | 20-31%        | 133                             | 39%         | 32-45%        | 142                   | 36%         | 30-42%        |                 |
| <b>Education</b>                          |          |                                     |             |               |                                 |             |               |                       |             |               | <b>**</b>       |
| Less than high school                     | 392      | 105                                 | 24%         | 19-30%        | 131                             | 36%         | 29-43%        | 156                   | 40%         | 33-46%        |                 |
| High school grad or GED                   | 1369     | 388                                 | 26%         | 23-28%        | 522                             | 39%         | 36-43%        | 459                   | 35%         | 32-38%        |                 |
| College 1-3 years                         | 1193     | 370                                 | 29%         | 25-32%        | 442                             | 39%         | 35-42%        | 381                   | 33%         | 29-36%        |                 |
| College grad                              | 1064     | 418                                 | 35%         | 32-39%        | 389                             | 39%         | 36-43%        | 257                   | 25%         | 22-29%        |                 |
| Advanced degree                           | 920      | 367                                 | 40%         | 36-43%        | 363                             | 41%         | 37-45%        | 190                   | 19%         | 16-23%        |                 |
| <b>Employment Status</b>                  |          |                                     |             |               |                                 |             |               |                       |             |               | <b>**</b>       |
| Employed for wages                        | 2215     | 706                                 | 30%         | 28-32%        | 827                             | 39%         | 37-42%        | 682                   | 30%         | 28-33%        |                 |
| Self-employed                             | 424      | 144                                 | 32%         | 26-37%        | 181                             | 44%         | 38-50%        | 99                    | 24%         | 19-29%        |                 |
| Retired                                   | 1656     | 568                                 | 32%         | 29-34%        | 645                             | 40%         | 37-43%        | 443                   | 28%         | 25-31%        |                 |
| Other                                     | 638      | 227                                 | 34%         | 30-39%        | 193                             | 33%         | 29-38%        | 218                   | 33%         | 28-37%        |                 |
| <b>Household Income</b>                   |          |                                     |             |               |                                 |             |               |                       |             |               | <b>**</b>       |
| <\$25,000                                 | 829      | 246                                 | 28%         | 24-32%        | 283                             | 35%         | 31-40%        | 300                   | 37%         | 32-41%        |                 |
| \$25,000-<\$35,000                        | 442      | 152                                 | 32%         | 26-37%        | 149                             | 32%         | 26-37%        | 141                   | 37%         | 30-43%        |                 |
| \$35,000-<\$50,000                        | 612      | 161                                 | 23%         | 19-27%        | 240                             | 43%         | 39-48%        | 211                   | 34%         | 29-38%        |                 |
| \$50,000-<\$75,000                        | 731      | 258                                 | 32%         | 28-36%        | 267                             | 40%         | 36-45%        | 206                   | 28%         | 24-32%        |                 |
| \$75,000 or greater                       | 1632     | 576                                 | 34%         | 32-37%        | 643                             | 40%         | 37-43%        | 413                   | 26%         | 23-28%        |                 |
| Don't know/not sure                       | 299      | 110                                 | 33%         | 26-39%        | 105                             | 40%         | 33-47%        | 84                    | 27%         | 21-33%        |                 |
| Refused                                   | 400      | 148                                 | 33%         | 27-38%        | 163                             | 41%         | 35-47%        | 89                    | 26%         | 20-32%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1



**TABLE 10-2. RESPONSES TO QUESTIONS REGARDING WEIGHT CONTROL, AMONG RESPONDENTS AGE 40 AND OLDER WHO REPORTED  
NOW TRYING TO LOSE WEIGHT ~**

|                                | Trying to lose weight |          |          |               |                 | Following a particular diet plan |          |          |               |                 | Using physical exercise to lose weight |          |          |               |                 |
|--------------------------------|-----------------------|----------|----------|---------------|-----------------|----------------------------------|----------|----------|---------------|-----------------|----------------------------------------|----------|----------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b>              | <b>n</b> | <b>%</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b>                         | <b>n</b> | <b>%</b> | <b>95% CI</b> | <b>Stat Sig</b> | <b>N</b>                               | <b>n</b> | <b>%</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| Total Population               | 5134                  | 2513     | 49%      | 47-51%        |                 | 2512                             | 429      | 17%      | 15-19%        |                 | 2508                                   | 1637     | 67%      | 64-69%        |                 |
| <b>Area of Residence</b>       | ^                     |          |          |               |                 | ^                                |          |          |               |                 | ^                                      |          |          |               |                 |
| Urban                          | 3036                  | 1544     | 49%      | 47-51%        |                 | 1543                             | 258      | 17%      | 15-19%        |                 | 1542                                   | 1013     | 66%      | 64-69%        |                 |
| Rural                          | 2071                  | 969      | 47%      | 45-50%        |                 | 969                              | 171      | 18%      | 15-21%        |                 | 966                                    | 624      | 67%      | 64-71%        |                 |
| <b>Gender</b>                  | **                    |          |          |               |                 | **                               |          |          |               |                 | ^                                      |          |          |               |                 |
| Male                           | 1907                  | 815      | 42%      | 39-45%        |                 | 815                              | 110      | 14%      | 11-17%        |                 | 814                                    | 560      | 69%      | 65-73%        |                 |
| Female                         | 3227                  | 1698     | 55%      | 53-57%        |                 | 1697                             | 319      | 19%      | 17-21%        |                 | 1694                                   | 1077     | 65%      | 62-68%        |                 |
| <b>Age</b>                     | **                    |          |          |               |                 | **                               |          |          |               |                 | **                                     |          |          |               |                 |
| 40-49 years                    | 1370                  | 698      | 49%      | 46-52%        |                 | 698                              | 131      | 17%      | 14-21%        |                 | 697                                    | 513      | 72%      | 68-77%        |                 |
| 50-64 years                    | 2072                  | 1152     | 54%      | 52-57%        |                 | 1151                             | 210      | 19%      | 16-22%        |                 | 1148                                   | 761      | 67%      | 64-70%        |                 |
| 65 years and above             | 1692                  | 663      | 41%      | 38-44%        |                 | 663                              | 88       | 13%      | 10-16%        |                 | 663                                    | 363      | 55%      | 51-60%        |                 |
| <b>Race</b>                    | ^                     |          |          |               |                 | ^                                |          |          |               |                 | ^                                      |          |          |               |                 |
| White                          | 4114                  | 2007     | 49%      | 48-51%        |                 | 2006                             | 348      | 17%      | 15-19%        |                 | 2004                                   | 1318     | 68%      | 65-70%        |                 |
| African American or Black      | 831                   | 419      | 48%      | 44-53%        |                 | 419                              | 68       | 17%      | 13-22%        |                 | 417                                    | 267      | 65%      | 59-70%        |                 |
| Other                          | 189                   | 87       | 43%      | 34-51%        |                 | 87                               | 13       | 15%      | 6-24%         |                 | 87                                     | 52       | 63%      | 51-75%        |                 |
| <b>Gender and Race</b>         | **                    |          |          |               |                 | ^                                |          |          |               |                 | ^                                      |          |          |               |                 |
| White male                     | 1595                  | 694      | 44%      | 42-47%        |                 | 694                              | 93       | 14%      | 11-16%        |                 | 694                                    | 482      | 70%      | 66-74%        |                 |
| African American male          | 240                   | 89       | 36%      | 28-43%        |                 | 89                               | 12       | 15%      | 6-25%         |                 | 88                                     | 60       | 66%      | 54-78%        |                 |
| Other male                     | 72                    | 32       | 39%      | 25-52%        |                 | 32                               | 5        | 11%      | 0-24%         |                 | 32                                     | 18       | 61%      | 41-82%        |                 |
| White female                   | 2519                  | 1313     | 54%      | 52-56%        |                 | 1312                             | 255      | 20%      | 17-22%        |                 | 1310                                   | 836      | 66%      | 63-69%        |                 |
| African American female        | 591                   | 330      | 58%      | 54-63%        |                 | 330                              | 56       | 18%      | 13-23%        |                 | 329                                    | 207      | 64%      | 58-70%        |                 |
| Other female                   | 117                   | 55       | 46%      | 35-56%        |                 | 55                               | 8        | 17%      | 5-29%         |                 | 55                                     | 34       | 64%      | 49-78%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 10-2. RESPONSES TO QUESTIONS REGARDING WEIGHT CONTROL, AMONG RESPONDENTS AGE 40 AND OLDER WHO REPORTED  
NOW TRYING TO LOSE WEIGHT ~**

|                                        | Trying to lose weight |      |     |        | Following a particular diet plan |     |     |        | Using physical exercise to lose weight |      |     |        |
|----------------------------------------|-----------------------|------|-----|--------|----------------------------------|-----|-----|--------|----------------------------------------|------|-----|--------|
| <b>Marital Status</b>                  | **                    |      |     |        | ^                                |     |     |        | **                                     |      |     |        |
| Married or partner of unmarried couple | 3064                  | 1550 | 49% | 47-51% | 1549                             | 282 | 18% | 16-20% | 1547                                   | 1055 | 69% | 66-72% |
| Divorced or separated                  | 885                   | 450  | 53% | 48-57% | 450                              | 68  | 16% | 12-21% | 448                                    | 277  | 62% | 56-68% |
| Widowed                                | 768                   | 293  | 40% | 35-44% | 293                              | 45  | 16% | 10-21% | 293                                    | 163  | 57% | 50-64% |
| Never married                          | 400                   | 212  | 49% | 43-56% | 212                              | 33  | 13% | 8-18%  | 212                                    | 138  | 66% | 58-73% |
| <b>Education</b>                       | **                    |      |     |        | ^                                |     |     |        | **                                     |      |     |        |
| Less than high school                  | 412                   | 165  | 42% | 35-48% | 165                              | 18  | 12% | 5-18%  | 165                                    | 77   | 51% | 40-61% |
| High school grad or GED                | 1416                  | 667  | 47% | 44-50% | 667                              | 113 | 17% | 14-21% | 666                                    | 409  | 61% | 56-66% |
| College 1-3 years                      | 1237                  | 639  | 51% | 47-54% | 638                              | 123 | 20% | 16-23% | 638                                    | 410  | 64% | 60-69% |
| College grad                           | 1104                  | 551  | 52% | 48-55% | 551                              | 89  | 16% | 12-20% | 550                                    | 382  | 71% | 66-75% |
| Advanced degree                        | 953                   | 489  | 49% | 45-53% | 489                              | 86  | 16% | 13-20% | 488                                    | 358  | 77% | 73-81% |
| <b>Employment Status</b>               | **                    |      |     |        | ^                                |     |     |        | **                                     |      |     |        |
| Employed for wages                     | 2289                  | 1231 | 53% | 50-55% | 1231                             | 240 | 19% | 16-21% | 1228                                   | 866  | 71% | 68-74% |
| Self-employed                          | 437                   | 222  | 47% | 42-53% | 222                              | 34  | 13% | 9-18%  | 222                                    | 155  | 68% | 61-75% |
| Retired                                | 1723                  | 722  | 43% | 40-46% | 721                              | 99  | 14% | 11-18% | 721                                    | 413  | 58% | 54-63% |
| Other                                  | 670                   | 331  | 48% | 43-53% | 331                              | 56  | 18% | 13-24% | 330                                    | 196  | 63% | 56-69% |
| <b>Household Income</b>                | **                    |      |     |        | **                               |     |     |        | **                                     |      |     |        |
| <\$25,000                              | 868                   | 378  | 45% | 41-50% | 378                              | 49  | 15% | 10-20% | 378                                    | 191  | 55% | 49-62% |
| \$25,000-<\$35,000                     | 451                   | 198  | 47% | 41-53% | 198                              | 19  | 8%  | 4-13%  | 198                                    | 128  | 67% | 58-76% |
| \$35,000-<\$50,000                     | 618                   | 303  | 49% | 44-54% | 303                              | 38  | 10% | 6-14%  | 302                                    | 194  | 63% | 57-70% |
| \$50,000-<\$75,000                     | 744                   | 373  | 48% | 44-53% | 373                              | 67  | 20% | 14-25% | 372                                    | 260  | 72% | 67-78% |
| \$75,000 or greater                    | 1679                  | 908  | 52% | 49-55% | 908                              | 189 | 20% | 17-23% | 906                                    | 649  | 71% | 67-74% |
| Don't know/not sure                    | 319                   | 128  | 41% | 34-47% | 128                              | 26  | 19% | 11-27% | 128                                    | 75   | 55% | 44-65% |
| Refused                                | 455                   | 225  | 49% | 42-55% | 224                              | 41  | 18% | 12-24% | 224                                    | 140  | 65% | 58-73% |
| <b>Body Mass Index</b>                 | **                    |      |     |        | **                               |     |     |        | **                                     |      |     |        |
| Healthy Weight (BMI 18.5-24.9)         | 1651                  | 408  | 24% | 22-27% | 408                              | 41  | 10% | 7-14%  | 406                                    | 291  | 73% | 68-78% |
| Overweight (BMI 25.0-29.9)             | 1846                  | 955  | 50% | 47-53% | 954                              | 143 | 15% | 12-18% | 954                                    | 653  | 71% | 67-74% |
| Obese (BMI ≥ 30.0)                     | 1435                  | 1037 | 73% | 70-76% | 1037                             | 228 | 21% | 18-24% | 1036                                   | 624  | 61% | 57-65% |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 10-3. ADHERENCE TO DIETARY RECOMMENDATIONS FOR FRUIT AND VEGETABLE CONSUMPTION,  
AMONG RESPONDENTS AGE 40 YEARS AND OLDER**

|                                        | Persons reporting they eat five or more servings of<br>fruits and vegetables per day ~# |          |             |               |                 |
|----------------------------------------|-----------------------------------------------------------------------------------------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b>                                                                                | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| Total Population                       | 5142                                                                                    | 1962     | 38%         | 36-40%        |                 |
| <b>Area of Residence</b>               |                                                                                         |          |             |               | **              |
| Urban                                  | 3066                                                                                    | 1229     | 39%         | 37-41%        |                 |
| Rural                                  | 2076                                                                                    | 733      | 35%         | 32-37%        |                 |
| <b>Gender</b>                          |                                                                                         |          |             |               | **              |
| Male                                   | 1910                                                                                    | 565      | 30%         | 28-33%        |                 |
| Female                                 | 3232                                                                                    | 1397     | 44%         | 42-47%        |                 |
| <b>Age</b>                             |                                                                                         |          |             |               | ^               |
| 40-49 years                            | 1373                                                                                    | 532      | 38%         | 35-42%        |                 |
| 50-64 years                            | 2077                                                                                    | 765      | 37%         | 35-40%        |                 |
| 65 years and above                     | 1962                                                                                    | 665      | 39%         | 36-41%        |                 |
| <b>Race</b>                            |                                                                                         |          |             |               | ^               |
| White                                  | 4120                                                                                    | 1575     | 38%         | 37-40%        |                 |
| African American or Black              | 833                                                                                     | 313      | 36%         | 32-40%        |                 |
| Other                                  | 189                                                                                     | 74       | 38%         | 30-47%        |                 |
| <b>Gender and Race</b>                 |                                                                                         |          |             |               | **              |
| White male                             | 1598                                                                                    | 477      | 30%         | 28-33%        |                 |
| African American male                  | 240                                                                                     | 71       | 31%         | 23-38%        |                 |
| Other male                             | 72                                                                                      | 17       | 24%         | 12-37%        |                 |
| White female                           | 2522                                                                                    | 1098     | 46%         | 43-48%        |                 |
| African American female                | 593                                                                                     | 242      | 41%         | 36-45%        |                 |
| Other female                           | 117                                                                                     | 57       | 50%         | 39-60%        |                 |
| <b>Marital Status</b>                  |                                                                                         |          |             |               | **              |
| Married or partner of unmarried couple | 3068                                                                                    | 1181     | 38%         | 36-40%        |                 |
| Divorced or separated                  | 886                                                                                     | 298      | 31%         | 28-35%        |                 |
| Widowed                                | 769                                                                                     | 311      | 42%         | 38-46%        |                 |
| Never married                          | 402                                                                                     | 164      | 41%         | 35-47%        |                 |
| <b>Education</b>                       |                                                                                         |          |             |               | **              |
| Less than high school                  | 409                                                                                     | 111      | 25%         | 20-31%        |                 |
| High school grad or GED                | 1421                                                                                    | 442      | 31%         | 28-34%        |                 |
| College 1-3 years                      | 1238                                                                                    | 487      | 39%         | 36-43%        |                 |
| College grad                           | 1107                                                                                    | 471      | 41%         | 38-45%        |                 |
| Advanced degree                        | 955                                                                                     | 447      | 46%         | 43-50%        |                 |
| <b>Employment Status</b>               |                                                                                         |          |             |               | ^               |
| Employed for wages                     | 2293                                                                                    | 849      | 37%         | 34-39%        |                 |
| Self-employed                          | 437                                                                                     | 175      | 40%         | 35-46%        |                 |
| Retired                                | 1726                                                                                    | 671      | 38%         | 35-41%        |                 |
| Other                                  | 671                                                                                     | 260      | 40%         | 35-45%        |                 |
| <b>Household Income</b>                |                                                                                         |          |             |               | **              |
| <\$25,000                              | 867                                                                                     | 291      | 33%         | 29-37%        |                 |
| \$25,000-<\$35,000                     | 452                                                                                     | 174      | 34%         | 29-40%        |                 |
| \$35,000-<\$50,000                     | 620                                                                                     | 214      | 33%         | 28-37%        |                 |
| \$50,000-<\$75,000                     | 746                                                                                     | 279      | 39%         | 35-43%        |                 |
| \$75,000 or greater                    | 1682                                                                                    | 701      | 40%         | 38-43%        |                 |
| Don't know/not sure                    | 320                                                                                     | 120      | 38%         | 32-45%        |                 |
| Refused                                | 455                                                                                     | 183      | 44%         | 37-50%        |                 |
| <b>Body Mass Index</b>                 |                                                                                         |          |             |               | **              |
| Healthy Weight (BMI 18.5-24.9)         | 1650                                                                                    | 711      | 43%         | 40-46%        |                 |
| Overweight (BMI 25.0-29.9)             | 1848                                                                                    | 691      | 37%         | 35-40%        |                 |
| Obese (BMI ≥ 30)                       | 1441                                                                                    | 481      | 33%         | 30-36%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value >0.05 - 0.1

^ p-value > 0.1

# derived variable-see text for explanation

TABLE 10-4. FREQUENCY OF MEAT<sup>#</sup> CONSUMPTION BY DEMOGRAPHIC FACTORS, AMONG RESPONDENTS AGE 40 YEARS AND OLDER ~

|                                |          | One or fewer servings of meat per week |          |               | 2 to 6 servings of meat per week |          |               | 7 or more servings of meat per week |          |               |                 |
|--------------------------------|----------|----------------------------------------|----------|---------------|----------------------------------|----------|---------------|-------------------------------------|----------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b>                               | <b>%</b> | <b>95% CI</b> | <b>n</b>                         | <b>%</b> | <b>95% CI</b> | <b>n</b>                            | <b>%</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| Total Population               | 5105     | 1065                                   | 21%      | 20-23%        | 2546                             | 49%      | 47-51%        | 1494                                | 30%      | 28-31%        |                 |
| <b>Area of Residence</b>       |          |                                        |          |               |                                  |          |               |                                     |          |               | <b>**</b>       |
| Urban                          | 3041     | 725                                    | 23%      | 21-25%        | 1501                             | 49%      | 47-51%        | 815                                 | 28%      | 26-30%        |                 |
| Rural                          | 2064     | 340                                    | 14%      | 13-16%        | 1045                             | 51%      | 48-53%        | 679                                 | 35%      | 32-37%        |                 |
| <b>Gender</b>                  |          |                                        |          |               |                                  |          |               |                                     |          |               | <b>**</b>       |
| Male                           | 1898     | 286                                    | 17%      | 15-19%        | 943                              | 49%      | 46-52%        | 669                                 | 34%      | 32-37%        |                 |
| Female                         | 3207     | 779                                    | 25%      | 23-27%        | 1603                             | 49%      | 47-52%        | 825                                 | 26%      | 24-28%        |                 |
| <b>Age</b>                     |          |                                        |          |               |                                  |          |               |                                     |          |               | <b>*</b>        |
| 40-49 years                    | 1370     | 274                                    | 20%      | 18-23%        | 649                              | 47%      | 44-51%        | 447                                 | 32%      | 29-35%        |                 |
| 50-64 years                    | 2069     | 417                                    | 21%      | 19-23%        | 1051                             | 49%      | 47-52%        | 601                                 | 30%      | 27-32%        |                 |
| 65 years and above             | 1666     | 374                                    | 23%      | 20-25%        | 846                              | 51%      | 48-54%        | 446                                 | 26%      | 23-29%        |                 |
| <b>Race</b>                    |          |                                        |          |               |                                  |          |               |                                     |          |               | <b>**</b>       |
| White                          | 4094     | 742                                    | 17%      | 16-19%        | 2172                             | 54%      | 52-55%        | 1180                                | 29%      | 27-31%        |                 |
| African American or Black      | 825      | 261                                    | 30%      | 26-34%        | 307                              | 39%      | 35-43%        | 257                                 | 31%      | 27-35%        |                 |
| Other                          | 186      | 62                                     | 30%      | 22-37%        | 67                               | 39%      | 30-48%        | 57                                  | 31%      | 23-39%        |                 |
| <b>Gender and Race</b>         |          |                                        |          |               |                                  |          |               |                                     |          |               | <b>**</b>       |
| White male                     | 1588     | 201                                    | 13%      | 11-15%        | 821                              | 52%      | 49-55%        | 566                                 | 35%      | 33-38%        |                 |
| African American male          | 238      | 62                                     | 27%      | 20-34%        | 99                               | 41%      | 34-49%        | 77                                  | 32%      | 25-38%        |                 |
| Other male                     | 72       | 23                                     | 25%      | 14-37%        | 23                               | 42%      | 27-56%        | 26                                  | 33%      | 20-47%        |                 |
| White female                   | 2506     | 541                                    | 21%      | 19-23%        | 1351                             | 55%      | 53-57%        | 614                                 | 24%      | 22-25%        |                 |
| African American female        | 587      | 199                                    | 33%      | 28-37%        | 208                              | 37%      | 32-41%        | 180                                 | 31%      | 26-35%        |                 |
| Other female                   | 114      | 39                                     | 34%      | 24-43%        | 44                               | 37%      | 27-47%        | 31                                  | 29%      | 20-39%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value >0.05 - 0.1

^ p-value > 0.1

# - Beef, pork, lamb, or veal

TABLE 10-4. FREQUENCY OF MEAT<sup>#</sup> CONSUMPTION BY DEMOGRAPHIC FACTORS, AMONG RESPONDENTS AGE 40 YEARS AND OLDER ~

|                                        |      | One or fewer servings of meat per week |     |        | 2 to 6 servings of meat per week |     |        | 7 or more servings of meat per week |     |        |          |
|----------------------------------------|------|----------------------------------------|-----|--------|----------------------------------|-----|--------|-------------------------------------|-----|--------|----------|
| Selected Characteristic                | N    | n                                      | %   | 95% CI | n                                | %   | 95% CI | n                                   | %   | 95% CI | Stat Sig |
| <b>Marital Status</b>                  |      |                                        |     |        |                                  |     |        |                                     |     |        | **       |
| Married or partner of unmarried couple | 3058 | 523                                    | 19% | 17-20% | 1635                             | 52% | 50-31% | 900                                 | 29% | 27-31% |          |
| Divorced or separated                  | 883  | 244                                    | 28% | 24-31% | 390                              | 42% | 38-46% | 249                                 | 31% | 27-35% |          |
| Widowed                                | 750  | 185                                    | 26% | 22-30% | 350                              | 46% | 42-51% | 215                                 | 28% | 24-32% |          |
| Never married                          | 397  | 107                                    | 25% | 20-31% | 165                              | 41% | 35-47% | 125                                 | 33% | 28-39% |          |
| <b>Education</b>                       |      |                                        |     |        |                                  |     |        |                                     |     |        | **       |
| Less than high school                  | 397  | 100                                    | 24% | 19-30% | 157                              | 38% | 32-44% | 140                                 | 38% | 31-45% |          |
| High school grad or GED                | 1409 | 246                                    | 18% | 15-20% | 687                              | 48% | 45-51% | 473                                 | 34% | 31-37% |          |
| College 1-3 years                      | 1230 | 241                                    | 20% | 17-23% | 629                              | 50% | 47-54% | 360                                 | 30% | 26-33% |          |
| College grad                           | 1107 | 246                                    | 22% | 19-25% | 576                              | 51% | 47-54% | 285                                 | 27% | 24-30% |          |
| Advanced degree                        | 953  | 229                                    | 24% | 21-28% | 494                              | 52% | 48-55% | 230                                 | 24% | 21-28% |          |
| <b>Employment Status</b>               |      |                                        |     |        |                                  |     |        |                                     |     |        | ^        |
| Employed for wages                     | 2286 | 469                                    | 21% | 19-23% | 1121                             | 48% | 46-51% | 696                                 | 31% | 29-33% |          |
| Self-employed                          | 437  | 78                                     | 20% | 15-24% | 234                              | 50% | 44-56% | 125                                 | 30% | 25-36% |          |
| Retired                                | 1703 | 354                                    | 22% | 20-25% | 867                              | 51% | 48-53% | 482                                 | 27% | 25-30% |          |
| Other                                  | 664  | 158                                    | 21% | 18-25% | 318                              | 49% | 44-54% | 188                                 | 30% | 25-34% |          |
| <b>Household Income</b>                |      |                                        |     |        |                                  |     |        |                                     |     |        | **       |
| <\$25,000                              | 851  | 220                                    | 25% | 22-29% | 341                              | 39% | 34-43% | 290                                 | 36% | 32-40% |          |
| \$25,000-<\$35,000                     | 450  | 97                                     | 18% | 14-22% | 200                              | 44% | 38-50% | 153                                 | 38% | 32-44% |          |
| \$35,000-<\$50,000                     | 619  | 114                                    | 19% | 15-23% | 317                              | 51% | 47-56% | 188                                 | 29% | 25-33% |          |
| \$50,000-<\$75,000                     | 746  | 145                                    | 21% | 17-25% | 377                              | 47% | 43-52% | 224                                 | 31% | 27-36% |          |
| \$75,000 or greater                    | 1680 | 324                                    | 20% | 18-22% | 909                              | 53% | 51-56% | 447                                 | 27% | 24-29% |          |
| Don't know/not sure                    | 311  | 77                                     | 27% | 20-33% | 159                              | 47% | 40-54% | 75                                  | 27% | 20-33% |          |
| Refused                                | 448  | 88                                     | 22% | 16-27% | 243                              | 54% | 48-61% | 117                                 | 24% | 19-29% |          |
| <b>Body Mass Index</b>                 |      |                                        |     |        |                                  |     |        |                                     |     |        | **       |
| Healthy Weight (BMI 18.5-24.9)         | 1641 | 390                                    | 24% | 21-26% | 828                              | 50% | 47-53% | 423                                 | 26% | 24-29% |          |
| Overweight (BMI 25.0-29.9)             | 1834 | 372                                    | 20% | 18-23% | 917                              | 50% | 47-53% | 545                                 | 30% | 27-32% |          |
| Obese (BMI ≥ 30.0)                     | 1431 | 255                                    | 19% | 16-22% | 699                              | 47% | 43-50% | 477                                 | 34% | 31-37% |          |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value >0.05 - 0.1

^ p-value > 0.1

# - Beef, pork, lamb, or veal

**TABLE 10-5. LEVEL OF MODERATE PHYSICAL ACTIVITY BY DEMOGRAPHIC CHARACTERISTICS, AMONG RESPONDENTS AGE 40 YEARS AND OLDER**

|                                |          | Do not engage in moderate physical activity for at least 30 minutes a day, at least one day per week ~ |             |               | Engage in moderate physical activity for at least 30 minutes a day, 1-2 days per week ~ |             |               | Engage in moderate physical activity for at least 30 minutes a day, 3-4 days per week ~ |             |               | Engage in moderate physical activity for at least 30 minutes a day, 5-7 days per week ~ |             |               |                 |
|--------------------------------|----------|--------------------------------------------------------------------------------------------------------|-------------|---------------|-----------------------------------------------------------------------------------------|-------------|---------------|-----------------------------------------------------------------------------------------|-------------|---------------|-----------------------------------------------------------------------------------------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b> | <b>N</b> | <b>n</b>                                                                                               | <b>wt %</b> | <b>95% CI</b> | <b>n</b>                                                                                | <b>wt %</b> | <b>95% CI</b> | <b>n</b>                                                                                | <b>wt %</b> | <b>95% CI</b> | <b>n</b>                                                                                | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| Total Population               | 4956     | 1730                                                                                                   | 34%         | 33-36%        | 385                                                                                     | 8%          | 7-9%          | 1142                                                                                    | 24%         | 23-26%        | 1699                                                                                    | 33%         | 32-35%        |                 |
| <b>Area of Residence</b>       |          |                                                                                                        |             |               |                                                                                         |             |               |                                                                                         |             |               |                                                                                         |             |               | <b>**</b>       |
| Urban                          | 2955     | 1028                                                                                                   | 34%         | 32-36%        | 249                                                                                     | 8%          | 7-9%          | 705                                                                                     | 25%         | 23-27%        | 973                                                                                     | 32%         | 30-34%        |                 |
| Rural                          | 2001     | 702                                                                                                    | 35%         | 33-38%        | 136                                                                                     | 22%         | 5-8%          | 437                                                                                     | 22%         | 19-24%        | 726                                                                                     | 37%         | 34-39%        |                 |
| <b>Gender</b>                  |          |                                                                                                        |             |               |                                                                                         |             |               |                                                                                         |             |               |                                                                                         |             |               | <b>^</b>        |
| Male                           | 1855     | 633                                                                                                    | 35%         | 32-37%        | 149                                                                                     | 9%          | 7-10%         | 431                                                                                     | 25%         | 22-27%        | 642                                                                                     | 32%         | 29-35%        |                 |
| Female                         | 3101     | 1097                                                                                                   | 34%         | 32-36%        | 236                                                                                     | 7%          | 6-8%          | 711                                                                                     | 24%         | 22-26%        | 1057                                                                                    | 34%         | 32-36%        |                 |
| <b>Age</b>                     |          |                                                                                                        |             |               |                                                                                         |             |               |                                                                                         |             |               |                                                                                         |             |               | <b>**</b>       |
| 40-49 years                    | 1346     | 413                                                                                                    | 32%         | 29-35%        | 93                                                                                      | 7%          | 5-9%          | 317                                                                                     | 25%         | 22-27%        | 523                                                                                     | 36%         | 33-40%        |                 |
| 50-64 years                    | 2011     | 676                                                                                                    | 33%         | 31-36%        | 172                                                                                     | 9%          | 8-11%         | 488                                                                                     | 25%         | 23-27%        | 675                                                                                     | 32%         | 30-35%        |                 |
| 65 years and above             | 1599     | 641                                                                                                    | 40%         | 37-43%        | 120                                                                                     | 7%          | 6-9%          | 337                                                                                     | 23%         | 20-25%        | 501                                                                                     | 30%         | 27-33%        |                 |
| <b>Race</b>                    |          |                                                                                                        |             |               |                                                                                         |             |               |                                                                                         |             |               |                                                                                         |             |               | <b>**</b>       |
| White                          | 3968     | 1335                                                                                                   | 32%         | 30-34%        | 299                                                                                     | 8%          | 7-9%          | 900                                                                                     | 24%         | 22-25%        | 1434                                                                                    | 36%         | 35-38%        |                 |
| African American or Black      | 805      | 331                                                                                                    | 40%         | 36-44%        | 69                                                                                      | 8%          | 6-10%         | 196                                                                                     | 26%         | 22-30%        | 209                                                                                     | 26%         | 22-29%        |                 |
| Other                          | 183      | 64                                                                                                     | 39%         | 30-48%        | 17                                                                                      | 7%          | 3-11%         | 46                                                                                      | 24%         | 17-32%        | 56                                                                                      | 30%         | 22-38%        |                 |
| <b>Gender and Race</b>         |          |                                                                                                        |             |               |                                                                                         |             |               |                                                                                         |             |               |                                                                                         |             |               | <b>**</b>       |
| White male                     | 1549     | 513                                                                                                    | 31%         | 28-34%        | 118                                                                                     | 9%          | 7-10%         | 366                                                                                     | 26%         | 23-28%        | 552                                                                                     | 35%         | 32-38%        |                 |
| African American male          | 235      | 97                                                                                                     | 44%         | 37-52%        | 26                                                                                      | 10%         | 6-14%         | 53                                                                                      | 23%         | 17-29%        | 59                                                                                      | 23%         | 17-29%        |                 |
| Other male                     | 71       | 23                                                                                                     | 42%         | 27-56%        | 5                                                                                       | 4%          | 0-10%         | 12                                                                                      | 16%         | 5-27%         | 31                                                                                      | 38%         | 24-52%        |                 |
| White female                   | 2419     | 822                                                                                                    | 33%         | 31-35%        | 181                                                                                     | 7%          | 6-8%          | 534                                                                                     | 22%         | 20-24%        | 882                                                                                     | 38%         | 36-40%        |                 |
| African American female        | 570      | 234                                                                                                    | 37%         | 32-41%        | 43                                                                                      | 7%          | 5-9%          | 143                                                                                     | 28%         | 24-33%        | 150                                                                                     | 28%         | 23-32%        |                 |
| Other female                   | 112      | 41                                                                                                     | 36%         | 26-47%        | 12                                                                                      | 9%          | 4-15%         | 34                                                                                      | 31%         | 21-41%        | 25                                                                                      | 23%         | 14-32%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 10-5. LEVEL OF MODERATE PHYSICAL ACTIVITY BY DEMOGRAPHIC CHARACTERISTICS, AMONG RESPONDENTS AGE 40 YEARS AND OLDER**

|                                        |          | Do not engage in moderate physical activity for at least 30 minutes a day, at least one day per week ~ |             |               | Engage in moderate physical activity for at least 30 minutes a day, 1-2 days per week ~ |             |               | Engage in moderate physical activity for at least 30 minutes a day, 3-4 days per week ~ |             |               | Engage in moderate physical activity for at least 30 minutes a day, 5-7 days per week ~ |             |               |                 |
|----------------------------------------|----------|--------------------------------------------------------------------------------------------------------|-------------|---------------|-----------------------------------------------------------------------------------------|-------------|---------------|-----------------------------------------------------------------------------------------|-------------|---------------|-----------------------------------------------------------------------------------------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b> | <b>n</b>                                                                                               | <b>wt %</b> | <b>95% CI</b> | <b>n</b>                                                                                | <b>wt %</b> | <b>95% CI</b> | <b>n</b>                                                                                | <b>wt %</b> | <b>95% CI</b> | <b>n</b>                                                                                | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| <b>Marital Status</b>                  |          |                                                                                                        |             |               |                                                                                         |             |               |                                                                                         |             |               |                                                                                         |             |               | <b>**</b>       |
| Married or partner of unmarried couple | 2974     | 937                                                                                                    | 33%         | 31-35%        | 224                                                                                     | 8%          | 7-9%          | 749                                                                                     | 26%         | 24-28%        | 1064                                                                                    | 33%         | 31-35%        |                 |
| Divorced or separated                  | 857      | 313                                                                                                    | 34%         | 30-38%        | 77                                                                                      | 9%          | 7-11%         | 171                                                                                     | 21%         | 17-24%        | 296                                                                                     | 36%         | 32-41%        |                 |
| Widowed                                | 716      | 316                                                                                                    | 44%         | 39-48%        | 54                                                                                      | 8%          | 5-10%         | 137                                                                                     | 19%         | 16-23%        | 209                                                                                     | 29%         | 25-33%        |                 |
| Never married                          | 393      | 159                                                                                                    | 38%         | 32-44%        | 27                                                                                      | 9%          | 5-13%         | 83                                                                                      | 22%         | 17-27%        | 124                                                                                     | 32%         | 26-38%        |                 |
| <b>Education</b>                       |          |                                                                                                        |             |               |                                                                                         |             |               |                                                                                         |             |               |                                                                                         |             |               | <b>**</b>       |
| Less than high school                  | 392      | 202                                                                                                    | 48%         | 41-55%        | 23                                                                                      | 6%          | 3-9%          | 53                                                                                      | 17%         | 11-22%        | 114                                                                                     | 29%         | 23-36%        |                 |
| High school grad or GED                | 1348     | 500                                                                                                    | 37%         | 34-41%        | 102                                                                                     | 8%          | 6-10%         | 301                                                                                     | 23%         | 20-25%        | 445                                                                                     | 32%         | 29-36%        |                 |
| College 1-3 years                      | 1197     | 415                                                                                                    | 34%         | 31-38%        | 104                                                                                     | 9%          | 7-11%         | 263                                                                                     | 24%         | 20-27%        | 415                                                                                     | 33%         | 30-37%        |                 |
| College grad                           | 1077     | 316                                                                                                    | 30%         | 27-34%        | 72                                                                                      | 6%          | 5-8%          | 283                                                                                     | 29%         | 26-33%        | 406                                                                                     | 35%         | 31-38%        |                 |
| Advanced degree                        | 931      | 293                                                                                                    | 31%         | 27-34%        | 82                                                                                      | 10%         | 7-12%         | 239                                                                                     | 24%         | 21-28%        | 317                                                                                     | 35%         | 31-39%        |                 |
| <b>Employment Status</b>               |          |                                                                                                        |             |               |                                                                                         |             |               |                                                                                         |             |               |                                                                                         |             |               | <b>**</b>       |
| Employed for wages                     | 2239     | 733                                                                                                    | 33%         | 30-35%        | 192                                                                                     | 9%          | 7-10%         | 547                                                                                     | 9%          | 23-27%        | 767                                                                                     | 33%         | 31-36%        |                 |
| Self-employed                          | 421      | 113                                                                                                    | 28%         | 23-34%        | 25                                                                                      | 6%          | 3-9%          | 101                                                                                     | 25%         | 20-30%        | 182                                                                                     | 41%         | 35-46%        |                 |
| Retired                                | 1638     | 612                                                                                                    | 37%         | 34-39%        | 128                                                                                     | 8%          | 6-10%         | 369                                                                                     | 24%         | 22-27%        | 529                                                                                     | 31%         | 28-34%        |                 |
| Other                                  | 644      | 269                                                                                                    | 42%         | 36-47%        | 37                                                                                      | 5%          | 3-8%          | 121                                                                                     | 20%         | 16-24%        | 217                                                                                     | 33%         | 29-38%        |                 |
| <b>Household Income</b>                |          |                                                                                                        |             |               |                                                                                         |             |               |                                                                                         |             |               |                                                                                         |             |               | <b>**</b>       |
| <\$25,000                              | 837      | 380                                                                                                    | 44%         | 39-48%        | 62                                                                                      | 8%          | 6-11%         | 141                                                                                     | 18%         | 14-21%        | 254                                                                                     | 30%         | 26-34%        |                 |
| \$25,000-<\$35,000                     | 440      | 172                                                                                                    | 39%         | 33-45%        | 31                                                                                      | 6%          | 3-8%          | 94                                                                                      | 22%         | 17-27%        | 143                                                                                     | 33%         | 28-39%        |                 |
| \$35,000-<\$50,000                     | 595      | 218                                                                                                    | 38%         | 33-43%        | 52                                                                                      | 9%          | 6-11%         | 128                                                                                     | 23%         | 19-27%        | 197                                                                                     | 30%         | 26-35%        |                 |
| \$50,000-<\$75,000                     | 724      | 217                                                                                                    | 29%         | 25-33%        | 49                                                                                      | 7%          | 5-10%         | 195                                                                                     | 27%         | 23-32%        | 263                                                                                     | 37%         | 32-41%        |                 |
| \$75,000 or greater                    | 1646     | 469                                                                                                    | 29%         | 26-32%        | 142                                                                                     | 9%          | 7-11%         | 422                                                                                     | 27%         | 24-30%        | 613                                                                                     | 35%         | 32-38%        |                 |
| Don't know/not sure                    | 296      | 124                                                                                                    | 44%         | 37-51%        | 21                                                                                      | 6%          | 3-9%          | 60                                                                                      | 22%         | 16-28%        | 91                                                                                      | 28%         | 22-34%        |                 |
| Refused                                | 418      | 150                                                                                                    | 38%         | 31-45%        | 28                                                                                      | 6%          | 4-9%          | 102                                                                                     | 24%         | 19-29%        | 138                                                                                     | 32%         | 26-38%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

**TABLE 10-6. PARTICIPATION IN VIGOROUS PHYSICAL ACTIVITY THREE OR MORE DAYS PER WEEK BY DEMOGRAPHIC CHARACTERISTICS, AMONG RESPONDENTS AGE 40 YEARS AND OLDER**

|                                        | Engage in vigorous physical activity for three or more days per week for 20 or more minutes per occasion ~ |          |             |               |                 |
|----------------------------------------|------------------------------------------------------------------------------------------------------------|----------|-------------|---------------|-----------------|
| <b>Selected Characteristic</b>         | <b>N</b>                                                                                                   | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
| Total Population                       | 5094                                                                                                       | 1151     | 24%         | 23-26%        |                 |
| <b>Area of Residence</b>               | ^                                                                                                          |          |             |               |                 |
| Urban                                  | 3044                                                                                                       | 699      | 24%         | 22-26%        |                 |
| Rural                                  | 2050                                                                                                       | 452      | 24%         | 22-26%        |                 |
| <b>Gender</b>                          | **                                                                                                         |          |             |               |                 |
| Male                                   | 1894                                                                                                       | 505      | 27%         | 25-30%        |                 |
| Female                                 | 3200                                                                                                       | 646      | 22%         | 20-23%        |                 |
| <b>Age</b>                             | **                                                                                                         |          |             |               |                 |
| 40-49 years                            | 1363                                                                                                       | 415      | 32%         | 29-35%        |                 |
| 50-64 years                            | 2057                                                                                                       | 477      | 23%         | 21-25%        |                 |
| 65 years and above                     | 1674                                                                                                       | 259      | 15%         | 13-17%        |                 |
| <b>Race</b>                            | *                                                                                                          |          |             |               |                 |
| White                                  | 4082                                                                                                       | 958      | 25%         | 24-27%        |                 |
| African American or Black              | 826                                                                                                        | 150      | 21%         | 17-25%        |                 |
| Other                                  | 186                                                                                                        | 43       | 23%         | 16-31%        |                 |
| <b>Gender and Race</b>                 | **                                                                                                         |          |             |               |                 |
| White male                             | 1586                                                                                                       | 431      | 28%         | 26-31%        |                 |
| African American male                  | 238                                                                                                        | 58       | 25%         | 19-32%        |                 |
| Other male                             | 70                                                                                                         | 16       | 23%         | 11-35%        |                 |
| White female                           | 2496                                                                                                       | 527      | 23%         | 21-25%        |                 |
| African American female                | 588                                                                                                        | 92       | 18%         | 14-21%        |                 |
| Other female                           | 116                                                                                                        | 27       | 24%         | 15-32%        |                 |
| <b>Marital Status</b>                  | **                                                                                                         |          |             |               |                 |
| Married or partner of unmarried couple | 3039                                                                                                       | 789      | 26%         | 24-28%        |                 |
| Divorced or separated                  | 876                                                                                                        | 187      | 22%         | 19-26%        |                 |
| Widowed                                | 760                                                                                                        | 88       | 12%         | 9-15%         |                 |
| Never married                          | 403                                                                                                        | 83       | 21%         | 16-27%        |                 |
| <b>Education</b>                       | **                                                                                                         |          |             |               |                 |
| Less than high school                  | 407                                                                                                        | 37       | 10%         | 6-15%         |                 |
| High school grad or GED                | 1408                                                                                                       | 244      | 18%         | 16-21%        |                 |
| College 1-3 years                      | 1230                                                                                                       | 239      | 19%         | 16-22%        |                 |
| College grad                           | 1096                                                                                                       | 324      | 31%         | 28-35%        |                 |
| Advanced degree                        | 942                                                                                                        | 306      | 35%         | 32-39%        |                 |
| <b>Employment Status</b>               | **                                                                                                         |          |             |               |                 |
| Employed for wages                     | 2276                                                                                                       | 607      | 29%         | 26-31%        |                 |
| Self-employed                          | 435                                                                                                        | 134      | 30%         | 25-35%        |                 |
| Retired                                | 1707                                                                                                       | 295      | 17%         | 15-19%        |                 |
| Other                                  | 663                                                                                                        | 112      | 18%         | 15-22%        |                 |
| <b>Household Income</b>                | **                                                                                                         |          |             |               |                 |
| <\$25,000                              | 862                                                                                                        | 104      | 13%         | 9-16%         |                 |
| \$25,000-<\$35,000                     | 444                                                                                                        | 93       | 22%         | 17-27%        |                 |
| \$35,000-<\$50,000                     | 617                                                                                                        | 119      | 19%         | 15-23%        |                 |
| \$50,000-<\$75,000                     | 741                                                                                                        | 180      | 25%         | 21-28%        |                 |
| \$75,000 or greater                    | 1674                                                                                                       | 519      | 33%         | 30-35%        |                 |
| Don't know/not sure                    | 313                                                                                                        | 34       | 10%         | 6-14%         |                 |
| Refused                                | 443                                                                                                        | 102      | 23%         | 18-28%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1



**TABLE 10-7. PARTICIPATION IN EITHER VIGOROUS PHYSICAL ACTIVITY THREE OR MORE DAYS OR MODERATE ACTIVITY FIVE TO SEVEN DAYS PER WEEK BY DEMOGRAPHIC CHARACTERISTICS, AMONG RESPONDENTS AGE 40 YEARS AND OLDER**

|                                        | Engage in vigorous physical activity on $\geq 3$ days per week for $\geq 20$ minutes per occasion OR in moderate physical activity on 5-7 days per week for $\geq 30$ minutes a day ~ |          |             |               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------|---------------|
| <b>Selected Characteristic</b>         | <b>N</b>                                                                                                                                                                              | <b>n</b> | <b>wt %</b> | <b>95% CI</b> |
| Total Population                       | 4952                                                                                                                                                                                  | 2247     | 46%         | 44-48%        |
| <b>Area of Residence</b>               | ^                                                                                                                                                                                     |          |             |               |
| Urban                                  | 2247                                                                                                                                                                                  | 1331     | 78%         | 76-80%        |
| Rural                                  | 2705                                                                                                                                                                                  | 1627     | 79%         | 77-80%        |
| <b>Gender</b>                          | *                                                                                                                                                                                     |          |             |               |
| Male                                   | 1854                                                                                                                                                                                  | 900      | 47%         | 45-50%        |
| Female                                 | 3098                                                                                                                                                                                  | 1347     | 44%         | 42-47%        |
| <b>Age</b>                             | **                                                                                                                                                                                    |          |             |               |
| 40-49 years                            | 1344                                                                                                                                                                                  | 708      | 52%         | 49-56%        |
| 50-64 years                            | 2008                                                                                                                                                                                  | 901      | 44%         | 42-47%        |
| 65 years and above                     | 1600                                                                                                                                                                                  | 638      | 38%         | 36-41%        |
| <b>Race</b>                            | **                                                                                                                                                                                    |          |             |               |
| White                                  | 3964                                                                                                                                                                                  | 1871     | 49%         | 47-50%        |
| African American or Black              | 806                                                                                                                                                                                   | 300      | 39%         | 35-43%        |
| Other                                  | 182                                                                                                                                                                                   | 76       | 42%         | 34-51%        |
| <b>Gender and Race</b>                 | **                                                                                                                                                                                    |          |             |               |
| White male                             | 1547                                                                                                                                                                                  | 766      | 50%         | 47-53%        |
| African American male                  | 236                                                                                                                                                                                   | 96       | 40%         | 32-47%        |
| Other male                             | 71                                                                                                                                                                                    | 38       | 49%         | 35-64%        |
| White female                           | 2417                                                                                                                                                                                  | 1105     | 47%         | 45-50%        |
| African American female                | 570                                                                                                                                                                                   | 204      | 38%         | 34-43%        |
| Other female                           | 111                                                                                                                                                                                   | 38       | 36%         | 26-47%        |
| <b>Marital Status</b>                  | **                                                                                                                                                                                    |          |             |               |
| Married or partner of unmarried couple | 2972                                                                                                                                                                                  | 1446     | 47%         | 45-50%        |
| Divorced or separated                  | 853                                                                                                                                                                                   | 374      | 46%         | 41-50%        |
| Widowed                                | 717                                                                                                                                                                                   | 255      | 36%         | 32-40%        |
| Never married                          | 394                                                                                                                                                                                   | 165      | 43%         | 37-49%        |
| <b>Education</b>                       | **                                                                                                                                                                                    |          |             |               |
| Less than high school                  | 392                                                                                                                                                                                   | 131      | 35%         | 28-41%        |
| High school grad or GED                | 1348                                                                                                                                                                                  | 549      | 40%         | 37-44%        |
| College 1-3 years                      | 1197                                                                                                                                                                                  | 523      | 42%         | 39-46%        |
| College grad                           | 1076                                                                                                                                                                                  | 552      | 52%         | 48-55%        |
| Advanced degree                        | 928                                                                                                                                                                                   | 489      | 54%         | 51-58%        |
| <b>Employment Status</b>               | **                                                                                                                                                                                    |          |             |               |
| Employed for wages                     | 2235                                                                                                                                                                                  | 1076     | 49%         | 47-52%        |
| Self-employed                          | 422                                                                                                                                                                                   | 233      | 54%         | 49-60%        |
| Retired                                | 1635                                                                                                                                                                                  | 676      | 39%         | 37-42%        |
| Other                                  | 646                                                                                                                                                                                   | 256      | 40%         | 35-45%        |
| <b>Household Income</b>                | **                                                                                                                                                                                    |          |             |               |
| <\$25,000                              | 834                                                                                                                                                                                   | 297      | 36%         | 32-41%        |
| \$25,000-<\$35,000                     | 438                                                                                                                                                                                   | 191      | 44%         | 38-50%        |
| \$35,000-<\$50,000                     | 596                                                                                                                                                                                   | 252      | 41%         | 36-45%        |
| \$50,000-<\$75,000                     | 721                                                                                                                                                                                   | 353      | 50%         | 45-54%        |
| \$75,000 or greater                    | 1653                                                                                                                                                                                  | 870      | 52%         | 49-55%        |
| Don't know/not sure                    | 296                                                                                                                                                                                   | 104      | 33%         | 26-39%        |
| Refused                                | 414                                                                                                                                                                                   | 180      | 43%         | 36-49%        |

~ Some data missing for marital status, education, and employment status

\*\* p-value  $\leq 0.05$

\* p-value  $> 0.05 - 0.1$

^ p-value  $> 0.1$

**Table 10-8. RESPONDENTS REPORTING THAT, IN THE PAST 12 MONTHS, A HEALTH CARE PROFESSIONAL RECOMMENDED THEY BEGIN OR CONTINUE TO ENGAGE IN EXERCISE OR PHYSICAL ACTIVITY ~**

| <b>Selected Characteristic</b>         | <b>N</b> | <b>n</b> | <b>wt %</b> | <b>95% CI</b> | <b>Stat Sig</b> |
|----------------------------------------|----------|----------|-------------|---------------|-----------------|
| Total Population                       | 5134     | 2352     | 46%         | 44-47%        |                 |
| <b>Area of Residence</b>               |          |          |             |               | <b>**</b>       |
| Urban                                  | 3063     | 1469     | 47%         | 45-49%        |                 |
| Rural                                  | 2071     | 883      | 42%         | 39-44%        |                 |
| <b>Gender</b>                          |          |          |             |               | <b>**</b>       |
| Male                                   | 1907     | 812      | 43%         | 40-46%        |                 |
| Female                                 | 3227     | 1540     | 48%         | 46-50%        |                 |
| <b>Age</b>                             |          |          |             |               | <b>**</b>       |
| 40-49 years                            | 1370     | 584      | 42%         | 39-45%        |                 |
| 50-64 years                            | 2075     | 1021     | 50%         | 47-52%        |                 |
| 65 years and above                     | 1689     | 747      | 45%         | 42-48%        |                 |
| <b>Race</b>                            |          |          |             |               | <b>**</b>       |
| White                                  | 4115     | 1847     | 44%         | 43-46%        |                 |
| African American or Black              | 830      | 418      | 49%         | 45-53%        |                 |
| Other                                  | 189      | 87       | 46%         | 37-54%        |                 |
| <b>Gender and Race</b>                 |          |          |             |               | <b>**</b>       |
| White male                             | 1597     | 676      | 43%         | 40-45%        |                 |
| African American male                  | 238      | 103      | 43%         | 36-51%        |                 |
| Other male                             | 72       | 33       | 48%         | 34-62%        |                 |
| White female                           | 2518     | 1171     | 46%         | 44-48%        |                 |
| African American female                | 592      | 315      | 53%         | 48-58%        |                 |
| Other female                           | 117      | 54       | 44%         | 33-54%        |                 |
| <b>Marital Status</b>                  |          |          |             |               | <b>^</b>        |
| Married or partner of unmarried couple | 3064     | 1425     | 46%         | 44-48%        |                 |
| Divorced or separated                  | 882      | 412      | 45%         | 41-49%        |                 |
| Widowed                                | 767      | 322      | 44%         | 39-48%        |                 |
| Never married                          | 404      | 186      | 44%         | 38-50%        |                 |
| <b>Education</b>                       |          |          |             |               | <b>**</b>       |
| Less than high school                  | 408      | 142      | 36%         | 30-43%        |                 |
| High school grad or GED                | 1419     | 605      | 43%         | 40-47%        |                 |
| College 1-3 years                      | 1237     | 581      | 46%         | 43-50%        |                 |
| College grad                           | 1106     | 540      | 49%         | 46-53%        |                 |
| Advanced degree                        | 953      | 479      | 47%         | 44-51%        |                 |
| <b>Employment Status</b>               |          |          |             |               | <b>^</b>        |
| Employed for wages                     | 2290     | 1077     | 46%         | 43-48%        |                 |
| Self-employed                          | 438      | 184      | 41%         | 36-47%        |                 |
| Retired                                | 1723     | 798      | 48%         | 45-51%        |                 |
| Other                                  | 669      | 288      | 44%         | 39-49%        |                 |
| <b>Household Income</b>                |          |          |             |               | <b>**</b>       |
| <\$25,000                              | 867      | 329      | 39%         | 34-43%        |                 |
| \$25,000-<\$35,000                     | 451      | 199      | 44%         | 38-50%        |                 |
| \$35,000-<\$50,000                     | 619      | 290      | 48%         | 43-53%        |                 |
| \$50,000-<\$75,000                     | 748      | 359      | 47%         | 42-51%        |                 |
| \$75,000 or greater                    | 1680     | 839      | 48%         | 46-51%        |                 |
| Don't know/not sure                    | 318      | 131      | 40%         | 33-47%        |                 |
| Refused                                | 451      | 205      | 44%         | 39-50%        |                 |

~ Some data missing for marital status, education, and employment status

\*\* p-value ≤ 0.05

\* p-value > 0.05 - 0.1

^ p-value > 0.1

TABLE 10-9. CANCER SCREENING PRACTICES BY PHYSICAL ACTIVITY, DIET, AND BODY MASS INDEX

|                                                                                                                     | Persons reporting to have ever had a fecal occult blood test ~ |      |     |        |          | Persons reporting to have ever had a sigmoidoscopy or colonoscopy ~ |      |     |        |          | Men reporting to have ever had a Prostate-Specific Antigen Test # |     |     |        |          | Men reporting to have ever had a digital rectal examination # |     |     |        |          |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------|-----|--------|----------|---------------------------------------------------------------------|------|-----|--------|----------|-------------------------------------------------------------------|-----|-----|--------|----------|---------------------------------------------------------------|-----|-----|--------|----------|
| Selected characteristic                                                                                             | N                                                              | n    | wt% | 95%CI  | Stat Sig | N                                                                   | n    | wt% | 95%CI  | Stat Sig | N                                                                 | n   | wt% | 95%CI  | Stat Sig | N                                                             | n   | wt% | 95%CI  | Stat Sig |
| <b>Do you engage in vigorous physical activity for 3 or more days per week for 20 or more minutes per occasion?</b> |                                                                |      |     |        | ^        |                                                                     |      |     |        | ^        |                                                                   |     |     |        | ^        |                                                               |     |     |        | ^        |
| Yes                                                                                                                 | 729                                                            | 432  | 58% | 54-62% |          | 733                                                                 | 525  | 72% | 68-75% |          | 319                                                               | 254 | 75% | 69-82% |          | 341                                                           | 309 | 91% | 88-94% |          |
| No                                                                                                                  | 2970                                                           | 1691 | 57% | 55-59% |          | 2971                                                                | 68   | 68% | 66-70% |          | 992                                                               | 760 | 74% | 71-78% |          | 1061                                                          | 952 | 90% | 88-92% |          |
| <b>In a typical week, how many days do you engage in moderate physical activity for at least 30 minutes a day?</b>  |                                                                |      |     |        | **       |                                                                     |      |     |        | ^        |                                                                   |     |     |        | *        |                                                               |     |     |        | ^        |
| 0 days/week                                                                                                         | 1308                                                           | 710  | 54% | 51-57% |          | 1302                                                                | 874  | 67% | 64-70% |          | 432                                                               | 343 | 76% | 70-81% |          | 481                                                           | 424 | 88% | 85-91% |          |
| 1-2 days/week                                                                                                       | 287                                                            | 170  | 58% | 51-65% |          | 289                                                                 | 194  | 65% | 59-72% |          | 306                                                               | 254 | 80% | 74-87% |          | 110                                                           | 96  | 87% | 81-94% |          |
| 3-4 days/week                                                                                                       | 816                                                            | 481  | 62% | 57-66% |          | 823                                                                 | 584  | 72% | 68-75% |          | 103                                                               | 76  | 70% | 59-81% |          | 317                                                           | 295 | 93% | 90-96% |          |
| 5-7 days/week                                                                                                       | 1166                                                           | 694  | 66% | 53-60% |          | 1170                                                                | 817  | 68% | 65-72% |          | 440                                                               | 314 | 69% | 64-75% |          | 460                                                           | 411 | 89% | 87-92% |          |
| <b>How many total servings of fruits and vegetables do you eat each day?</b>                                        |                                                                |      |     |        | **       |                                                                     |      |     |        | **       |                                                                   |     |     |        | **       |                                                               |     |     |        | **       |
| 0-2 fruits/vegetables per day                                                                                       | 852                                                            | 426  | 51% | 47-55% |          | 855                                                                 | 533  | 62% | 58-66% |          | 370                                                               | 251 | 64% | 58-71% |          | 406                                                           | 350 | 86% | 83-90% |          |
| 3-4 fruits/vegetables per day                                                                                       | 1465                                                           | 876  | 60% | 56-63% |          | 1468                                                                | 1034 | 71% | 68-74% |          | 556                                                               | 453 | 79% | 75-84% |          | 593                                                           | 539 | 91% | 89-93% |          |
| 5+ fruits/vegetables per day                                                                                        | 1418                                                           | 843  | 58% | 55-61% |          | 1418                                                                | 1010 | 70% | 67-73% |          | 398                                                               | 318 | 77% | 71-83% |          | 417                                                           | 381 | 91% | 89-94% |          |
| <b>How many servings of red meat do you eat each week?</b>                                                          |                                                                |      |     |        | **       |                                                                     |      |     |        | **       |                                                                   |     |     |        | **       |                                                               |     |     |        | ^        |
| 0-1 servings per week                                                                                               | 787                                                            | 430  | 56% | 52-61% |          | 786                                                                 | 520  | 66% | 62-71% |          | 207                                                               | 160 | 72% | 64-81% |          | 222                                                           | 196 | 88% | 84-93% |          |
| 2-6 servings per week                                                                                               | 1880                                                           | 1135 | 60% | 57-63% |          | 1886                                                                | 1369 | 72% | 70-75% |          | 685                                                               | 550 | 79% | 75-83% |          | 728                                                           | 665 | 91% | 89-93% |          |
| 7+ servings per week                                                                                                | 1035                                                           | 570  | 53% | 49-57% |          | 1038                                                                | 675  | 65% | 61-68% |          | 423                                                               | 306 | 69% | 63-75% |          | 455                                                           | 402 | 88% | 85-91% |          |
| <b>Body Mass Index</b>                                                                                              |                                                                |      |     |        | **       |                                                                     |      |     |        | ^        |                                                                   |     |     |        | ^        |                                                               |     |     |        | **       |
| Healthy weight (BMI 18.5 - 24.9)                                                                                    | 1156                                                           | 650  | 55% | 51-58% |          | 1158                                                                | 780  | 67% | 64-70% |          | 333                                                               | 250 | 73% | 67-79% |          | 361                                                           | 314 | 87% | 84-90% |          |
| Overweight (BMI 25.0 - 29.9)                                                                                        | 1371                                                           | 833  | 61% | 58-64% |          | 1373                                                                | 978  | 70% | 67-73% |          | 615                                                               | 493 | 75% | 71-80% |          | 647                                                           | 581 | 90% | 87-92% |          |
| Obese (BMI ≥ 30.0)                                                                                                  | 1066                                                           | 596  | 56% | 52-60% |          | 1070                                                                | 745  | 70% | 67-74% |          | 365                                                               | 273 | 74% | 68-80% |          | 395                                                           | 365 | 92% | 90-95% |          |
| <b>Are you now trying to lose weight?</b>                                                                           |                                                                |      |     |        | ^        |                                                                     |      |     |        | **       |                                                                   |     |     |        | ^        |                                                               |     |     |        | *        |
| Yes                                                                                                                 | 1794                                                           | 1038 | 57% | 54-60% |          | 1807                                                                | 1295 | 71% | 69-74% |          | 576                                                               | 462 | 77% | 73-82% |          | 617                                                           | 563 | 91% | 89-93% |          |
| No                                                                                                                  | 1936                                                           | 1105 | 57% | 54-60% |          | 1929                                                                | 1283 | 66% | 64-69% |          | 746                                                               | 560 | 72% | 68-77% |          | 796                                                           | 705 | 89% | 86-91% |          |

~ Age ≥ 50 years

# African American men 45-49 years and all men ≥ 50 years

~~ Age ≥ 40 years

#~ Women ≥ 40 years with an intact uterus

\*\* p-value ≤ 0.05

\* p-value &gt; 0.05 - 0.1

^ p-value &gt; 0.1

TABLE 10-9. CANCER SCREENING PRACTICES BY PHYSICAL ACTIVITY, DIET, AND BODY MASS INDEX

|                                                                                                                     | Women reporting to have ever had a mammogram ~~ |      |     |        |          | Women reporting to have ever had a Pap test #~ |      |     |         |          | Persons reporting to have ever had oral cancer screening ~~ |      |     |        |          |
|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------|-----|--------|----------|------------------------------------------------|------|-----|---------|----------|-------------------------------------------------------------|------|-----|--------|----------|
| Selected characteristic                                                                                             | N                                               | n    | wt% | 95%CI  | Stat Sig | N                                              | n    | wt% | 95%CI   | Stat Sig | N                                                           | n    | wt% | 95%CI  | Stat Sig |
| <b>Do you engage in vigorous physical activity for 3 or more days per week for 20 or more minutes per occasion?</b> |                                                 |      |     |        | ^        |                                                |      |     |         | ^        |                                                             |      |     |        | **       |
| Yes                                                                                                                 | 646                                             | 611  | 94% | 92-96% |          | 496                                            | 487  | 98% | 97-100% |          | 1104                                                        | 623  | 52% | 48-56% |          |
| No                                                                                                                  | 2552                                            | 2406 | 94% | 92-95% |          | 1626                                           | 1593 | 98% | 97-99%  |          | 3746                                                        | 1756 | 45% | 43-47% |          |
| <b>In a typical week, how many days do you engage in moderate physical activity for at least 30 minutes a day?</b>  |                                                 |      |     |        | **       |                                                |      |     |         | ^        |                                                             |      |     |        | ^        |
| 0 days/week                                                                                                         | 1097                                            | 1024 | 92% | 90-95% |          | 688                                            | 668  | 97% | 96-99%  |          | 1641                                                        | 744  | 45% | 42-48% |          |
| 1-2 days/week                                                                                                       | 235                                             | 224  | 96% | 93-99% |          | 163                                            | 161  | 99% | 97-100% |          | 372                                                         | 180  | 45% | 39-51% |          |
| 3-4 days/week                                                                                                       | 710                                             | 687  | 97% | 95-98% |          | 475                                            | 466  | 97% | 95-99%  |          | 1090                                                        | 560  | 48% | 44-51% |          |
| 5-7 days/week                                                                                                       | 1057                                            | 987  | 92% | 90-94% |          | 744                                            | 733  | 98% | 97-99%  |          | 1623                                                        | 845  | 50% | 47-53% |          |
| <b>How many total servings of fruits and vegetables do you eat each day?</b>                                        |                                                 |      |     |        | **       |                                                |      |     |         | ^        |                                                             |      |     |        | **       |
| 0-2 fruits/vegetables per day                                                                                       | 657                                             | 604  | 91% | 88-94% |          | 433                                            | 423  | 97% | 96-99%  |          | 1161                                                        | 453  | 36% | 33-40% |          |
| 3-4 fruits/vegetables per day                                                                                       | 1178                                            | 1126 | 95% | 93-97% |          | 776                                            | 760  | 98% | 97-99%  |          | 1869                                                        | 910  | 46% | 43-49% |          |
| 5+ fruits/vegetables per day                                                                                        | 1395                                            | 1315 | 94% | 93-96% |          | 934                                            | 917  | 98% | 97-99%  |          | 1865                                                        | 1043 | 55% | 52-58% |          |
| <b>How many servings of red meat do you eat each week?</b>                                                          |                                                 |      |     |        | ^        |                                                |      |     |         | ^        |                                                             |      |     |        | **       |
| 0-1 servings per week                                                                                               | 779                                             | 739  | 94% | 92-96% |          | 511                                            | 496  | 97% | 95-99%  |          | 1015                                                        | 473  | 45% | 41-49% |          |
| 2-6 servings per week                                                                                               | 1602                                            | 1517 | 94% | 92-95% |          | 1090                                           | 1075 | 98% | 97-99%  |          | 2416                                                        | 1276 | 51% | 49-54% |          |
| 7+ servings per week                                                                                                | 824                                             | 768  | 94% | 92-96% |          | 525                                            | 514  | 98% | 96-99%  |          | 1429                                                        | 645  | 42% | 39-45% |          |
| <b>Body Mass Index</b>                                                                                              |                                                 |      |     |        | ^        |                                                |      |     |         | ^        |                                                             |      |     |        | **       |
| Healthy weight (BMI 18.5 - 24.9)                                                                                    | 1163                                            | 1089 | 93% | 92-95% |          | 855                                            | 839  | 98% | 96-99%  |          | 1572                                                        | 865  | 54% | 51-57% |          |
| Overweight (BMI 25.0 - 29.9)                                                                                        | 980                                             | 931  | 94% | 92-96% |          | 645                                            | 632  | 98% | 97-99%  |          | 1758                                                        | 888  | 48% | 45-51% |          |
| Obese (BMI ≥ 30.0)                                                                                                  | 908                                             | 864  | 95% | 93-97% |          | 527                                            | 519  | 99% | 98-100% |          | 1379                                                        | 568  | 39% | 36-42% |          |
| <b>Are you now trying to lose weight?</b>                                                                           |                                                 |      |     |        | **       |                                                |      |     |         | *        |                                                             |      |     |        | ^        |
| Yes                                                                                                                 | 1697                                            | 1620 | 95% | 94-96% |          | 1146                                           | 1128 | 98% | 98-99%  |          | 2389                                                        | 1191 | 47% | 45-50% |          |
| No                                                                                                                  | 1528                                            | 1420 | 92% | 90-94% |          | 996                                            | 970  | 97% | 96-98%  |          | 2499                                                        | 1209 | 47% | 44-49% |          |

~ Age ≥ 50 years

# African American men 45-49 years and all men ≥ 50 years

~~ Age ≥ 40 years

#~ Women ≥ 40 years with an intact uterus

\*\* p-value ≤ 0.05

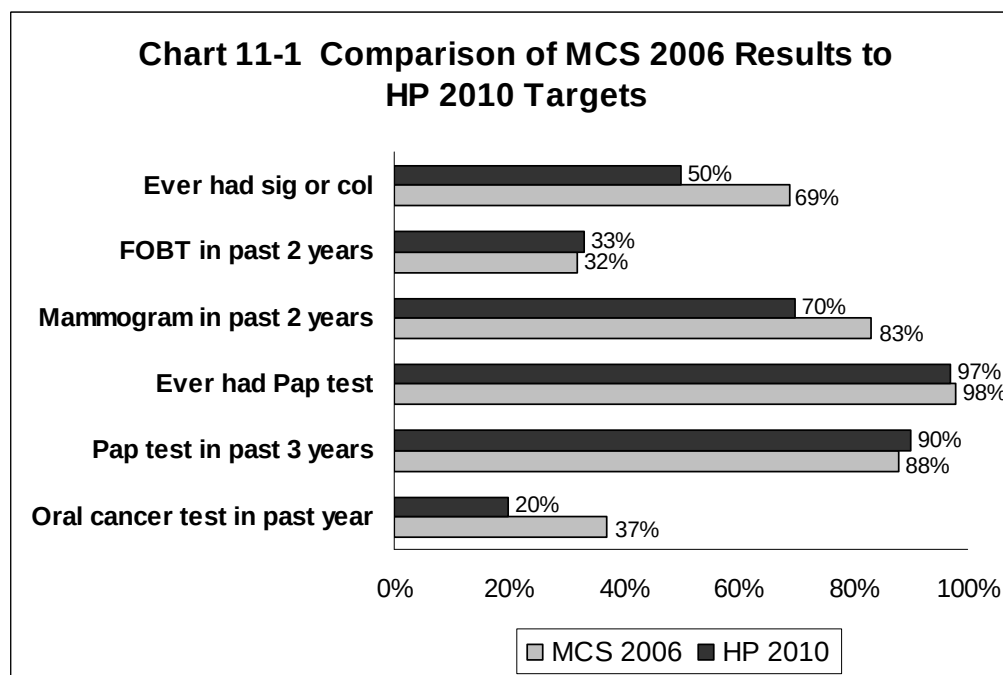
\* p-value &gt; 0.05 - 0.1

^ p-value &gt; 0.1

## Chapter 11. Summary of the MCS 2006 and Comparison between MCS 2002, 2004, and 2006

### 11.1 Summary of MCS 2006

The residents in Maryland continue to make significant progress in increasing both awareness and utilization of cancer screening tests. According to the results of the MCS 2006, Maryland adults exceeded the HP 2010 targets for colorectal cancer (CRC) screening with lower GI endoscopy (sigmoidoscopy and colonoscopy), having had a mammogram in the last 2 years, ever having a Pap test, and having oral cancer screening in the last year (Chart 11-1). Marylanders also came very close to meeting the HP 2010 targets for having an FOBT within the last 2 years (32% among those age 50 years and older compared to the Healthy People target of 33%) and for having a Pap test in the past 3 years (88% of women age 40 and older compared to HP 2010 target of 90%). There are no HP 2010 objectives related to routine prostate cancer screening, and the United States Preventive Services Task Force has not recommended such screening.<sup>1</sup> National screening data from the 2004 BRFSS, published by the American Cancer Society,<sup>2</sup> showed that 52% of men age 50 years and older have had a PSA test and 50% have had a DRE within the past year. By comparison, 57% of Maryland men in the MCS 2006 had a PSA or a DRE within the past year. (Maryland figures include African American men, age 45-49 years.)



<sup>1</sup> U.S. Preventive Services Task Force. 2002. Screening for Prostate Cancer. Available at <http://www.ahrq.gov/clinic/uspstf/uspsprca.htm>. Last accessed August 30, 2007.

<sup>2</sup> American Cancer Society. Cancer Prevention and Early Detection Facts & Figures 2006. Atlanta: American Cancer Society, 2006. Available at <http://www.cancer.org/downloads/STT/CPED2006PWSecured.pdf>. Last accessed February 7, 2007.

As was noted in 2002 and 2004, the results of the MCS 2006 showed important differences in cancer screening prevalence across demographic groups, including gender, race, age, education, income, and health insurance status. In the current survey, differences were noted between men and women only for oral cancer screening in the past year. As age increased, the percentage of people who report having cancer screening generally increased; both FOBT and lower GI endoscopy increased with age, as did prostate cancer screening (both PSA and DRE). The prevalence of breast cancer screening (mammography) within the last 2 years increased with age until women reach age 75 years, when it decreased. Women in the younger age groups (40 to 49 years and 50 to 64 years) reported a higher prevalence of ever having a Pap test as well as having had a Pap test in the last 3 years. Generally, cancer screening increased with higher educational levels and higher annual incomes.

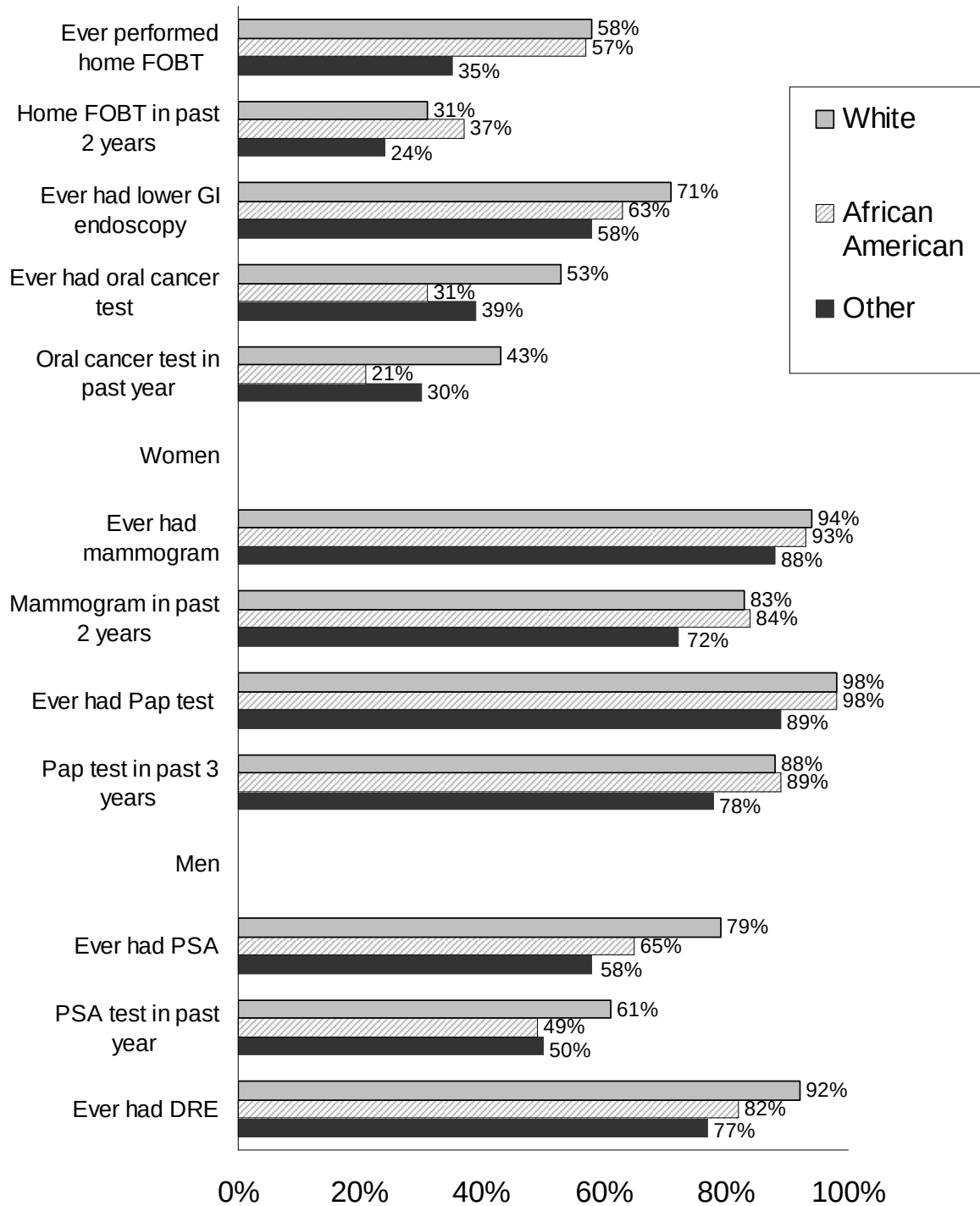
Racial differences in prevalence were found for several types of cancer screening (Chart 11-2). Non-White respondents (those who were African American or of other races) had a significantly lower prevalence of ever having lower GI endoscopy, of ever having oral cancer screening, and of having oral cancer screening in the past year, compared with White respondents. Non-White men were also less likely to have ever had a PSA, to have had a PSA test in the past year, or to have ever had a DRE test. Compared with White and African American respondents, people of other races had a significantly lower prevalence of ever performing a home FOBT or having an FOBT in the past 2 years. Women of other races had a lower prevalence of ever having a mammogram or Pap test, and of having a recent mammogram or Pap test.

MCS 2006 respondents who had health insurance reported higher rates of screening for all tests except ever having a Pap test among women. Those who reported being without health insurance sometime within the past year had lower screening rates for ever having lower GI endoscopy or mammography, and lower prevalence of mammography in the past 2 years and Pap test in the past 3 years.

Receiving a recommendation from a health care provider for cancer screening is a very important factor in whether a cancer screening test is done. When a health care provider recommended a mammogram or Pap test to female respondents, the prevalence rates of these screening tests were much higher than when no recommendation was made. For these and most other cancer screening tests examined in the MCS 2006, the lack of a doctor's recommendation was often a prominent reason cited by respondents for not having the test.

While Marylanders have been successful in meeting or exceeding several HP 2010 objectives related to cancer screening, they have been less successful in attaining objectives for some behavioral and lifestyle goals aimed at reducing risk of cancer and other chronic diseases. When asked the question, "How many fruits and vegetables do you eat per day," only 27% reported eating three or more servings of vegetables (compared to the HP 2010 target of 50%) and only 60% reported at least two daily servings of fruit (compared to the target of 75%). The MCS 2006 found that 16% of Marylanders age 40 years and older currently smoke cigarettes, which approaches but does not meet the HP 2010 target for adults of 12%. With respect to the physical activity objectives highlighted in HP 2010, 46% of Marylanders age 40 years and older reported engaging in either moderate activity for 30 minutes a day, 5-7 days a week, or vigorous activity for 20 minutes a day, 3 days a week, slightly below the HP 2010 target of 50%.

**Chart 11-2 Prevalence of cancer screening, by race, among MCS 2006 respondents**



Among Marylanders age 40 years and older, 29% are considered obese (based on self-reported height and weight), far higher than the HP 2010 target of 15%.

In summary, Marylanders are, as a group, knowledgeable about cancer screening tests and are being tested at rates comparable to or better than the national baselines. However, our data suggest disparities in prevalence of some screening tests based on race and other demographic factors, including age, education, employment status, and income. Other factors also have a significant influence on screening prevalence, including health insurance status, whether or not people have had a recent physical examination, and whether or not the health care provider recommends the test be done.

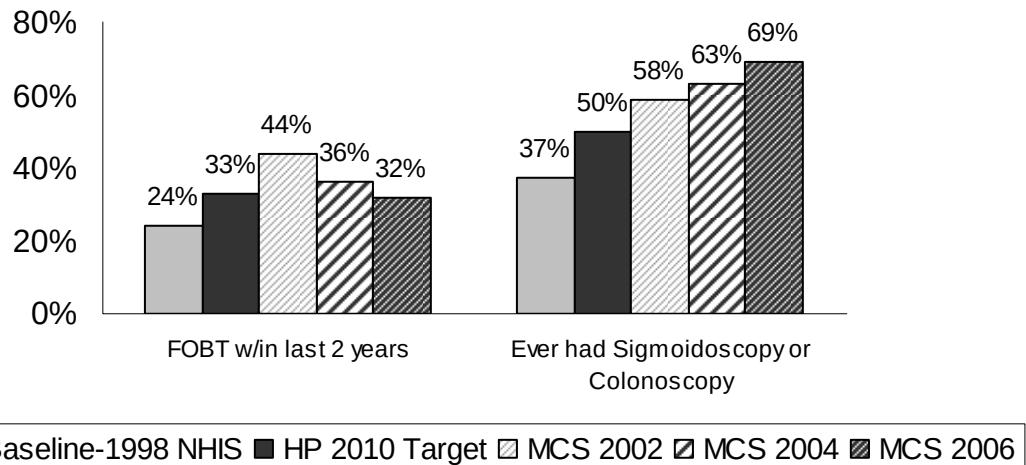
## **11.2 Comparison between MCS 2002, 2004, and 2006**

Table 11-1 displays comparisons between the results of the current MCS survey and those from the MCS 2002 and 2004. For comparisons in this report and in Table 11-1 we analyzed prostate screening questions for all men 50 years and older and for African American men age 45 to 49 years. We have not made comparisons between dietary and physical activity measures because the questions were not identical in all surveys.

A high percentage of Marylanders are familiar with CRC screening procedures, particularly sigmoidoscopy/colonoscopy. In the MCS 2006, 92% of Marylanders said they had heard of these tests, up from 91% in 2004 and 88% in 2002. While the percentage of Marylanders age 50 years and older who ever performed an FOBT has remained fairly steady, the proportion who reported having the test in the past 2 years continues to decline (44% in MCS 2002, 36% in 2004 and 32% in 2006; Chart 11-3). However, an increasing percentage of people age 50 years and older are reporting to have ever had lower GI endoscopic exams (58% in 2002, 63% in 2004, and 69% in 2006; Chart 11-3). Overall, it appears that Marylanders are moving away from CRC screening by FOBT and sigmoidoscopy, in favor of colonoscopy. As a result of the increases in prevalence of colonoscopy, the proportion of people never tested for CRC has dropped from 26% in 2002 to 20% in 2006. The prevalence of up-to-date colonoscopy has increased from 41% in 2002 to 59% in 2006.



**Chart 11-3 Prevalence of CRC Screening Among MCS 2006 Respondents Age 50 Years and Older, Compared to U.S. Baseline, Healthy People 2010 Targets, and Results of MCS 2002 and MCS 2004**



Screening rates for prostate cancer, cervical cancer, and breast cancer remained fairly stable between 2002, 2004, and 2006 surveys. The proportion of men reporting to have ever had a PSA test or a DRE did not change significantly from 2002 to 2006, nor did the proportion of men reporting prostate cancer screening in the past year. Similarly, the proportion of women reporting to have ever had a mammogram or Pap test, and the proportion of women who were up-to-date with breast or cervical cancer testing, did not change significantly from 2002 to 2006.

A statistically significant increase occurred in the prevalence of ever having oral cancer screening, rising from 43% in both 2002 and 2004 to 47% in 2006. The percent of Marylanders reporting to have had an oral cancer exam in the past year has also increased significantly, from 33% in 2002 to 37% in 2006.

The prevalence of overweight varied little between 2004 and 2006 (38% and 39%, respectively) and the percent of obese individuals in Maryland remained steady at 29%. The prevalence of current cigarette smoking did not change significantly between the 2002 and 2006 surveys.

**TABLE 11-1. COMPARISON OF POPULATION SCREENING AND RISK BEHAVIOR CHARACTERISTICS MEASURED IN THE MCS 2002, 2004, AND 2006 TO UNITED STATES  
BASELINE MEASUREMENTS AND HEALTHY PEOPLE 2010 OBJECTIVES**

|                                                                                                                           | MCS 2002    |               | MCS 2004    |               | MCS 2006    |               | US<br>Baseline | HP 2010<br>Target |
|---------------------------------------------------------------------------------------------------------------------------|-------------|---------------|-------------|---------------|-------------|---------------|----------------|-------------------|
| <b>Selected Population Screening Characteristic</b>                                                                       | <b>wt %</b> | <b>95% CI</b> | <b>wt %</b> | <b>95% CI</b> | <b>wt %</b> | <b>95% CI</b> | <b>%</b>       | <b>%</b>          |
| <b>Colorectal Cancer Screening</b>                                                                                        |             |               |             |               |             |               |                |                   |
| Heard of sigmoidoscopy/ colonoscopy ( $\geq 40$ years)                                                                    | 88%         | 87-89%        | 91%         | 90-92%        | 92%         | 91-93%        |                |                   |
| Awareness of no-cost colon screening at local health department ( $\geq 40$ years)                                        | 27%         | 26-29%        | 24%         | 23-26%        | 25%         | 24-27%        |                |                   |
| Ever performed a home FOBT ( $\geq 50$ years)                                                                             | 57%         | 56-59%        | 54%         | 52-56%        | 57%         | 55-59%        |                |                   |
| Performed a home FOBT in the last two years ( $\geq 50$ years)                                                            | 44%         | 42-46%        | 36%         | 34-38%        | 32%         | 30-34%        | 24%*           | 33%*              |
| Ever had a sigmoidoscopy/colonoscopy ( $\geq 50$ years)                                                                   | 58%         | 56-60%        | 63%         | 61-65%        | 69%         | 67-70%        | 37%*           | 50%*              |
| Of those who had lower GI endoscopy, most recent endoscopy was a sigmoidoscopy ( $\geq 50$ years)                         | 24%         | 22-26%        | 16%         | 15-19%        | 10%         | 9-11%         |                |                   |
| Of those who had lower GI endoscopy, most recent endoscopy was a colonoscopy ( $\geq 50$ years)                           | 76%         | 74-78%        | 84%         | 81-85%        | 90%         | 89-91%        |                |                   |
| <b>Up-to-Date Colorectal Cancer Testing (<math>\geq 50</math> years)</b>                                                  |             |               |             |               |             |               |                |                   |
| Never tested                                                                                                              | 26%         | 24-28%        | 23%         | 21-25%        | 20%         | 18-21%        |                |                   |
| Tested by not up to date                                                                                                  | 10%         | 9-12%         | 10%         | 9-11%         | 11%         | 10-12%        |                |                   |
| Up-to-date with only FOBT in the last year                                                                                | 11%         | 10-13%        | 9%          | 8-10%         | 6%          | 5-7%          |                |                   |
| Up-to-date with only sigmoidoscopy in the last 5 years                                                                    | 6%          | 5-7%          | 5%          | 4-6%          | 3%          | 2-3%          |                |                   |
| Up-to-date with FOBT in the last year and sigmoidoscopy in the last 5 years                                               | 5%          | 4-6%          | 3%          | 2-4%          | 2%          | 1-2%          |                |                   |
| Up-to-date with colonoscopy in the last 10 years +/- FOBT                                                                 | 41%         | 39-43%        | 50%         | 48-52%        | 59%         | 57-61%        |                |                   |
| <b>Prostate Cancer Screening (all men <math>\geq 50</math> years and African American men <math>\geq 45</math> years)</b> |             |               |             |               |             |               |                |                   |
| Ever had a PSA test among the PSA eligible group                                                                          | 73%         | 70-75%        | 77%         | 74-80%        | 74%         | 71-78%        |                |                   |
| Had a PSA test in the last year in PSA eligible group                                                                     | 58%         | 55-61%        | 60%         | 57-63%        | 57%         | 54-60%        |                |                   |
| Ever had a DRE among the PSA eligible group                                                                               | 88%         | 86-90%        | 86%         | 83-88%        | 89%         | 87-91%        |                |                   |
| Had a DRE in the last year among PSA eligible group                                                                       | 60%         | 57-63%        | 58%         | 55-62%        | 57%         | 54-60%        |                |                   |
| Had both a PSA and DRE in the last year                                                                                   | 47%         | 44-50%        | 47%         | 44-50%        | 45%         | 41-48%        |                |                   |
| <b>Breast and Cervical Cancer Screening (women <math>\geq 40</math> years)</b>                                            |             |               |             |               |             |               |                |                   |
| Health care provider recommended a mammogram in the last year                                                             | 86%         | 84-87%        | 84%         | 83-86%        | 86%         | 85-88%        |                |                   |
| Health care provider recommended a Pap test in the last year, among women who have not had a hysterectomy                 | 98%         | 97-98%        | 77%         | 75-79%        | 79%         | 77-81%        |                |                   |
| Ever had a mammogram                                                                                                      | 93%         | 92-94%        | 93%         | 91-94%        | 94%         | 93-95%        |                |                   |
| Had a mammogram in the last two years                                                                                     | 84%         | 82-82%        | 83%         | 82-85%        | 83%         | 81-84%        | 67%**          | 70%**             |
| Ever had a clinical breast exam                                                                                           | 94%         | 94-97%        | 96%         | 95-96%        | --          | --            |                |                   |
| Ever had a Pap test, among women who have not had a hysterectomy                                                          | 97%         | 96-98%        | 98%         | 98-99%        | 98%         | 97-99%        | 92%^*          | 97%^*             |
| Had a Pap test in the last three years, among women who have not had a hysterectomy                                       | 89%         | 88-91%        | 90%         | 88-91%        | 88%         | 86-89%        | 79%^*          | 90%^*             |

\* Adults  $\geq 50$  years

\*\* Women  $\geq 40$  years

^\* Women  $\geq 18$  years

^~ Persons  $\geq 2$  years

^^ Adults  $\geq 40$  years

^ Adults  $\geq 18$  years

~ Persons < 65 years

` Adults  $\geq 20$  years

TABLE 11-1. COMPARISON OF POPULATION SCREENING AND RISK BEHAVIOR CHARACTERISTICS MEASURED IN THE MCS 2002, 2004, AND 2006 TO UNITED STATES BASELINE MEASUREMENTS AND HEALTHY PEOPLE 2010 OBJECTIVES

|                                                           | MCS 2002 |        | MCS 2004 |        | MCS 2006 |        | US<br>Baseline | HP 2010<br>Target |
|-----------------------------------------------------------|----------|--------|----------|--------|----------|--------|----------------|-------------------|
| Selected Population Screening Characteristic              | wt %     | 95% CI | wt %     | 95% CI | wt %     | 95% CI | %              | %                 |
| <b>Oral Cancer Screening (<math>\geq 40</math> years)</b> |          |        |          |        |          |        |                |                   |
| Had a dental visit during the past year                   | 76%      | 75-77% | 76%      | 74-77% | 74%      | 72-75% | 44%^~          | 56%^~             |
| Ever had an oral cancer exam                              | 43%      | 41-44% | 43%      | 42-45% | 47%      | 45-49% |                |                   |
| Had an oral cancer exam in the last year                  | 33%      | 32-35% | 34%      | 32-35% | 37%      | 35-38% | 13%^^^         | 20%^^^            |
| <b>Access to Health Care (<math>\geq 40</math> years)</b> |          |        |          |        |          |        |                |                   |
| Has health insurance                                      | 94%      | 93-94% | 93%      | 92-94% | 94%      | 93-95% | 83%~           | 100%~             |
| Had no health insurance sometime in the last 12 months    | 3%       | 2-3%   | 5%       | 4-6%   | 3%       | 3-4%   |                |                   |
| <b>Life style Factors (<math>\geq 40</math> years)</b>    |          |        |          |        |          |        |                |                   |
| <b>Body mass index</b>                                    |          |        |          |        |          |        |                |                   |
| Healthy weight individuals BMI (18.5-24.9)                | 36%      | 35-38% | 33%      | 31-35% | 31%      | 30-33% | 42%^           | 60%^              |
| Overweight individuals (BMI 25.0-29.9)                    | 35%      | 33-36% | 38%      | 37-40% | 39%      | 38-41% |                |                   |
| Obese individuals (BMI $\geq 30.0$ )                      | 25%      | 24-27% | 29%      | 27-31% | 29%      | 28-31% | 23%^           | 15%^              |
| <b>Current smoking status</b>                             |          |        |          |        |          |        |                |                   |
| Never smokers                                             | 48%      | 47-50% | 50%      | 48-52% | 51%      | 50-53% |                |                   |
| Former smokers                                            | 33%      | 32-35% | 33%      | 31-34% | 32%      | 31-34% |                |                   |
| Current smokers                                           | 18%      | 17-20% | 17%      | 16-19% | 16%      | 15-18% | 24%`           | 12%`              |

\* Adults  $\geq 50$  years

\*\* Women  $\geq 40$  years

^\* Women  $\geq 18$  years

^~ Persons  $\geq 2$  years

^^ Adults  $\geq 40$  years

^ Adults  $\geq 18$  years

~ Persons < 65 years

` Adults  $\geq 20$  years

## Questionnaire for the Maryland Cancer Survey, 2006

Hello, my name is \_\_\_\_\_. I'm calling for the Maryland State Health Department and the University of Maryland. We're conducting a survey on cancer prevention and screening for Maryland residents. Your phone number has been chosen randomly for participation in this important survey. This call may be monitored for quality assurance purposes.

Have I reached you on a cell phone or a regular phone line (land line)?

If cell phone – Thank you very much. We are only talking to people on landlines for this survey.

If land line - Is this a private residence? READ ONLY IF NECESSARY (That is, a home as opposed to a business or an institution.)

IF "NO": Thank you very much. We are only talking to people in private residences. This number will not be included in the survey.

IF "YES": I need to randomly select one person who lives in your household to be interviewed.

How many members of your household, including yourself, are 40 years of age or older?  
\_\_\_\_\_ (1) NUMBER OF ADULTS AGED 40 OR GREATER. (If there is at least one person age 40 years and older, continue with survey for people 40 years and above)

IF "0" Thank you very much for your time. As we are only interviewing people aged 40 or older, we will not be interviewing anyone in your household for this survey. **STOP**

IF "1": Are you the individual who is at least 40 years of age?

IF "YES": Then you are the person I need to speak with. ENTER 1 MAN OR 1 WOMAN BELOW. (ASK GENDER IF NECESSARY).

IF "NO": Is the adult a man or a woman? ENTER 1 MAN OR 1 WOMAN BELOW,

May I speak with (him/her)? GO TO "CORRECT RESPONDENT"

IF ">1" In order to choose the person I need to speak to I need to know how many of these adults are men and how many are women.

\_\_\_\_\_ NUMBER OF MEN  
\_\_\_\_\_ NUMBER OF WOMEN

IF 1 MAN AND 1 WOMAN GO TO RANDOM SELECTION.

IF MORE THAN ONE OF EITHER GENDER

The person in your household that I need to speak with is \_\_\_\_\_.

TO CORRECT RESPONDENT: Hello, my name is \_\_\_\_\_. I'm calling for the Maryland State Health Department and the University of Maryland. We're conducting a survey on cancer screening for Maryland residents aged 40 years or older. Your phone number has been chosen randomly for participation in this important survey.

The information collected in this survey will assist the health department in designing cancer education and screening programs for Maryland residents.

I won't ask for your name, address, or other personal information that can identify you. You don't have to answer any question you don't want to, and you can end the interview at any time. The survey takes about 15 minutes and any information you give us will be confidential. If you have any questions about this survey, I will provide a toll free telephone number for you to call to get more information. This call may be monitored for quality assurance purposes.

## SECTION 1: HEALTH STATUS

I'd like to start with a question about your general health.

1.1 Would you say that in general your health is:

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

## SECTION 2: HEALTH CARE ACCESS

Now I'll ask you some questions about how you get your health care.

2.1 Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare or Medical Assistance?

- GO TO 2.3** ←
- |                       |
|-----------------------|
| 1 YES                 |
| 2 NO                  |
| 7 DON'T KNOW/NOT SURE |
| 8 REFUSED             |

2.2 During the past 12 months, was there any time that you did **not** have any health insurance or coverage?

- GO TO 2.4** ←
- |                       |
|-----------------------|
| 1 YES                 |
| 2 NO                  |
| 7 DON'T KNOW/NOT SURE |
| 8 REFUSED             |
| 9 NA                  |

2.3 About how long has it been since you had health insurance or coverage?  
READ ONLY IF NECESSARY

- 1 Within the past 6 months (ANYTIME < 6 MONTHS AGO)
- 2 Within the past year ( $\geq 6$  MONTHS BUT < 12 MONTHS AGO)
- 3 Within the past 2 years ( $\geq 1$  YEAR BUT < 2 YEARS)
- 4 Within the past 5 years ( $\geq 2$  YEARS BUT < 5 YEARS)
- 5 5 or more years ago
- 6 Have never had health insurance
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

- 2.4. Have you ever heard of the Maryland Health Insurance Plan (MHIP), a state administered health insurance program for Maryland residents who do not have access to health insurance?

1 YES  
2 NO  
7 DON'T KNOW/NOT SURE  
8 REFUSED

- 2.5 About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness or condition. READ ONLY IF NECESSARY

1 Within the past year (ANYTIME <12 MONTHS AGO)  
2 Within the past 2 years ( $\geq 1$  YEAR BUT < 2 YEARS)  
3 Within the past 5 years ( $\geq 2$  YEARS BUT < 5 YEARS)  
4 5 or more years ago  
5 Never visited the doctor for a routine checkup  
7 DON'T KNOW/NOT SURE  
8 REFUSED

- 2.6 Do you have one person you think of as your personal doctor or *primary* health care provider?

1 Yes, only one  
2 More than one  
3 No  
7 DON'T KNOW/NOT SURE  
8 REFUSED

IF "NO" ASK: Is there more than one or is there no person who you think of?

- 2.7 What kind of place do you go to most often when you're are sick or your need advice about your health? Is it . . .

1 A doctor's office or HMO  
2 A clinic or health center  
3 A hospital outpatient department  
4 A hospital emergency room  
5 An urgent care center, or  
6 Some other kind of place  
7 DON'T KNOW/NOT SURE  
8 REFUSED

### SECTION 3: COLON CANCER SCREENING

Now some questions about different kinds of cancer. We'll start with colon or bowel cancer which includes cancer of the rectum.

3.1 How likely do you think it is that you will develop colon cancer in the future?  
Would you say your chance of getting colon cancer is. . . .

- 1 Very low
- 2 Somewhat low
- 3 Moderate
- 4 Somewhat high
- 5 Very high
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

3.2 Has a parent, brother, sister or child of yours ever been diagnosed with colon cancer? (WE ARE INTERESTED IN FIRST DEGREE BLOOD RELATIVES ONLY DO NOT INCLUDE FAMILY MEMBERS RELATED ONLY THROUGH MARRIAGE SUCH AS STEPFATHER, STEPSISTER OR FAMILY MEMBERS WHO WERE ADOPTED).

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

3.3 Did you know that there are screening tests for colon cancer?

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

3.4 Can you think of any tests that find or detect colon cancer? Anything else?  
[DO NOT READ CHOICES, CODE ALL THAT APPLY]

- 1 BARIUM ENEMA
- 2 BIOPSY
- 3 STOOL BLOOD TEST/FECAL OCCULT BLOOD TEST
- 4 COLONOSCOPY
- 5 DIGITAL RECTAL EXAM
- 6 PROCTOSCOPY
- 7 SIGMOIDOSCOPY
- 8 LOWER GI
- 9 MRI/SCANS/CAT SCANS
- 10 BLOOD TEST
- 11 OTHER (SPECIFY) \_\_\_\_\_
- 12 NO/NOTHING
- 77 DON'T KNOW/NOT SURE
- 88 REFUSED



3.5 There are several tests used to screen for colon cancer. The first one we'll talk about is the fecal occult blood test or blood stool test. This is a test that may use a special kit, at home, to determine whether the stool contains blood. Have you ever heard of this test?

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

3.6 In the PAST 12 MONTHS, has a doctor or other health professional RECOMMENDED that you have a HOME blood stool test?

- 1 Yes
- 2 No
- 3 No doctor's visit in the past twelve months
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

3.7 Have you ever done this test using a home kit?

|                      |                       |
|----------------------|-----------------------|
| <b>GO TO Q. 3.11</b> | 1 YES                 |
|                      | 2 NO                  |
|                      | 7 DON'T KNOW/NOT SURE |
|                      | 8 REFUSED             |

3.8 How long has it been since you did your last blood stool test using a home kit?  
(READ ONLY IF NECESSARY)

- 1 Within the past year (<12 MONTHS AGO)
- 2 Within the past 2 years ( $\geq 1$  YEAR BUT < 2 YEARS AGO)
- 3 Within the past 3 years ( $\geq 2$  YEARS BUT < 3 YEARS AGO)
- 4 Within the past 5 years ( $\geq 3$  YEARS BUT < 5 YEARS AGO)
- 5 5 or more years ago
- 6 Never
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

3.9 What was the MAIN reason you did this exam? Was it . . . (READ CHOICES)

- 1 Part of a routine physical exam/screening test
- 2 Because of a symptom or health problem
- 3 Follow-up test of an earlier abnormal test
- 4 Family history
- 5 Other
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

3.10 You said your most recent stool blood test was {INSERT TIME FRAME FROM 3.8}. How long before that stool test was the previous one?

- 1 A year or less before
- 2 More than 1 but not more than 2 years before
- 3 More than 2 but not more than 5 years before
- 4 Over 5 years before
- 5 None before the most recent
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

**IF RESPONSE TO 3.8 WAS “WITHIN PAST YEAR “ SKIP TO Q 3.12**

3.11 What is the most important reason you have {NEVER done /NOT done a HOME blood stool test in the PAST YEAR}? (READ ONLY IF NECESSARY – RECORD ALL RESPONSES NOTED BY RESPONDENT).

- 01 No reason/never thought about it
- 02 Didn't need it/didn't know I needed this type of test
- 03 Doctor didn't order it/didn't say I needed it
- 04 Haven 't had any problems
- 05 Put it off/didn't get around to it
- 06 Too expensive/no insurance/cost
- 07 Too painful, unpleasant, or embarrassing
- 08 Had another type of colorectal exam like a colonoscopy, sigmoidoscopy or Barium enema.
- 09 Don't have doctor
- 10 Never heard of the test
- 11 Had stool blood test done at doctor's office
- 12 Age/too young
- 13 Other , SPECIFY: \_\_\_\_\_
- 77 DON'T KNOW/NOT SURE
- 88 REFUSED
- 99 NA

3.12 Sigmoidoscopy and colonoscopy are two other tests to screen for colon cancer. Both tests examine the bowel. A narrow, lighted tube is inserted in the rectum to look for growths in the colon. Sigmoidoscopy uses a shorter tube that just reaches the **lower** part of the colon. Colonoscopy uses a long tube and examines the **entire** colon. Before a colonoscopy is done, you are usually given medication through a needle in your arm to make you sleepy. Have you ever heard of these exams?

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

3.13 Has a doctor or other health professional ever RECOMMENDED that you have a sigmoidoscopy or colonoscopy?

|                     |   |                     |
|---------------------|---|---------------------|
| <b>SKIP TO 3.15</b> | 1 | YES                 |
|                     | 2 | NO                  |
|                     | 7 | DON'T KNOW/NOT SURE |
|                     | 8 | REFUSED             |

3.14. In addition to the recommendation which of the following did the doctor or health care professional do to help you get the test? Did the doctor or health care professional . . . . (MARK ALL THAT APPLY)

- 1 Send you a letter or postcard or call to tell you to get the test
- 2 Refer you to a place or doctor where the test could be done.
- 3 Call the office and set up the appointment for you
- 4 Do the sigmoidoscopy or colonoscopy him/herself
- 5 Do something else, specify: \_\_\_\_\_
- 6 Do nothing other than make the recommendation
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

3.15 Have you ever had a sigmoidoscopy or colonoscopy?

|                      |   |                     |
|----------------------|---|---------------------|
| <b>GO TO Q. 3.21</b> | 1 | YES                 |
|                      | 2 | NO                  |
|                      | 7 | DON'T KNOW/NOT SURE |
|                      | 8 | REFUSED             |

3.16 What was this MOST RECENT exam called: a sigmoidoscopy or a colonoscopy, or something else?

- 1 Sigmoidoscopy
- 2 Colonoscopy
- 3 Something else: Specify \_\_\_\_\_
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

3.17 How long has it been since you had your last sigmoidoscopy or colonoscopy? (READ ONLY IF NECESSARY)

- 1 Within the past year (<12 MONTHS AGO)
- 2 Within the past 2 years ( $\geq 1$  YR BUT < 2 YRS AGO)
- 3 Within the past 5 years ( $\geq 2$  YRS BUT < 5 YRS AGO)
- 4 Within the past 10 years ( $\geq 5$  YRS BUT < 10 YRS AGO)
- 5 10 years ago
- 6 More than 10 years ago
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

3.18 What was the MAIN reason you had this exam? Was it . . . (READ ALL CHOICES)

- 1 Part of a routine physical exam/screening test
- 2 Because of a symptom or health problem
- 3 Follow-up test of an earlier abnormal test (Fecal Occult Blood Test or sigmoidoscopy)
- 4 Family history
- 5 Other
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

3.19 You said your most recent {sigmoidoscopy/colonoscopy} was {INSERT TIME FRAME FROM 3.17}. How long before that {sigmoidoscopy/colonoscopy} was the previous sigmoidoscopy or colonoscopy?

- 1 A year or less before
- 2 More than 1 but not more than 5 years before
- 3 More than 5 but not more than 10 years before
- 4 10 years before
- 5 More than 10 years before
- 6 None before the most recent
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

**GO to 3.21**

3.20 IF HAD PREVIOUS TEST: Was this exam: a sigmoidoscopy or a colonoscopy?

- 1 Sigmoidoscopy
- 2 Colonoscopy
- 3 Something else: Specify \_\_\_\_\_
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

3.21

**IF RESPONDENT HAS HAD COLONOSCOPY WITHIN PAST 10 YEARS OR SIGMOIDOSCOPY WITHIN PAST 5 YEARS SKIP TO Q 3.22**

What is the most important reason you have [NEVER had/NOT had] one of these exams in the LAST (5 YEARS if last exam was a sigmoidoscopy or something else in 3.16) (10 years if last exam was a colonoscopy in 3.16)]? (READ ONLY IF NECESSARY– RECORD ALL RESPONSES NOTED BY RESPONDENT).

- 01 No reason/never thought about it
- 02 Didn't need it/didn't know I needed this type of test
- 03 Doctor didn't order it/didn't say I needed it
- 04 Haven 't had any problems
- 05 Put it off/didn't get around to it
- 06 Too expensive/no insurance/cost
- 07 Too painful, unpleasant, or embarrassing
- 08 Had a barium enema
- 09 Don't have doctor
- 10 Didn't want to know if I had cancer
- 11 Didn't have childcare or respite care if adult caregiver
- 12 Too young or not old enough
- 13 Other , SPECIFY: \_\_\_\_\_
- 77 DON'T KNOW/NOT SURE
- 88 REFUSED
- 99 NA

3.22 Have you seen or heard colon cancer screening being promoted on TV or radio, at a health care facility or in magazine or newspaper or some other place?

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

3.23 Are you aware that most health departments in Maryland have a no cost colon cancer screening program for low income individuals?

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

At this point we ask questions about cancer screening that are specific to men or women.

3.24 Can you please tell me if you are male or female. (ASK ONLY IF NECESSARY. RECORD GENDER)

- 1 MALE
- 2 FEMALE →
- 8 REFUSED

**GO TO SECTION 5**

## SECTION 4: PROSTATE CANCER SCREENING

Now I'm going to ask you about prostate cancer screening.

- 4.1 Has your father, or a brother or son of yours ever been diagnosed with prostate cancer?  
(WE ARE INTERESTED IN FIRST DEGREE BLOOD RELATIVES ONLY, DO NOT INCLUDE FAMILY MEMBERS RELATED ONLY THROUGH MARRIAGE SUCH AS STEPFATHER, STEPBROTHER OR ADOPTED BROTHERS OR SONS)

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

- 4.2 Has a doctor or other health care professional ever discussed prostate cancer screening with you?

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

- 4.3 A Prostate-Specific Antigen test, also called a PSA test, is a blood test used to check men for prostate cancer. Have you ever heard of this test?

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

- 4.4 Have you ever **had** a PSA test?

- GO TO Q. 4.7

- 1 YES
  - 2 NO
  - 7 DON'T KNOW/NOT SURE
  - 8 REFUSED
  - 9 NA

- 4.5 How long has it been since you had your last PSA test?  
(READ ONLY IF NECESSARY)

- 1 Within the past year (<12 MONTHS AGO)
- 2 Within the past 2 years ( $\geq 1$  YEAR BUT < 2 YEARS AGO)
- 3 Within the past 3 years ( $\geq 2$  YEARS BUT < 3 YEARS AGO)
- 4 Within the past 5 years ( $\geq 3$  YEARS BUT < 5 YEARS AGO)
- 5 5 or more years ago
- 6 Never
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

4.6 You said your last PSA test was {INSERT TIME FRAME FROM 4.5}. How long before that PSA test was the previous one?

- 1 A year or less before
- 2 More than 1 but not more than 2 years before
- 3 More than 2 but not more than 5 years before
- 4 Over 5 years before
- 5 None before the most recent
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

**IF RESPONDENT HAS NEVER HAD A PSA TEST OR HAS NOT HAD ONE IN THE PAST YEAR (Q. 4.5) ASK 4.7. ALL OTHERS SKIP TO 4.8.**

4.7 What is the most important reason you have [never had a PSA test /NOT had a PSA test in the last 12 months]? (READ ONLY IF NECESSARY-RECORD ALL RESPONSES NOTED BY RESPONDENT).

- 01 No reason/never thought about it
- 02 Didn't need it/didn't know I needed this type of test
- 03 Doctor didn't order it/didn't say I needed it
- 04 Haven 't had any problems
- 05 Put it off/didn't get around to it
- 06 Too expensive/no insurance/cost
- 07 Didn't want to know the results
- 08 Don't have doctor
- 09 Too young or not old enough
- 10 Never heard of the test
- 11 Other, SPECIFY: \_\_\_\_\_
- 77 DON'T KNOW/NOT SURE
- 88 REFUSED
- 99 NA

4.8 A digital rectal exam is an exam in which a doctor, nurse, or other health professional places a gloved finger into the rectum to feel the size, shape, and hardness of the prostate gland. Have you ever had a digital rectal exam?

- |               |   |                     |
|---------------|---|---------------------|
| GO TO Q 6.1 ← | 1 | YES                 |
|               | 2 | NO                  |
|               | 7 | DON'T KNOW/NOT SURE |
|               | 8 | REFUSED             |
|               | 9 | NA                  |

4.9 How long has it been since your last digital rectal exam?

- 1 Within the past year (<12 MONTHS AGO)
- 2 Within the past 2 years ( $\geq 1$  YEAR BUT < 2 YEARS AGO)
- 3 Within the past 3 years ( $\geq 2$  YEARS BUT < 3 YEARS AGO)
- 4 Within the past 5 years ( $\geq 3$  YEARS BUT < 5 YEARS AGO)
- 5 5 or more years ago
- 6 Never
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

|                                               |
|-----------------------------------------------|
| <b>IF RESPONDENT IS MALE, GO TO SECTION 6</b> |
|-----------------------------------------------|

## SECTION 5: WOMEN'S HEALTH

Now for some questions about screening tests for women.

5.1 Has your mother or a sister or daughter of yours ever been diagnosed with breast cancer? (WE ARE INTERESTED IN FIRST DEGREE BLOOD RELATIVES ONLY, DO NOT INCLUDE FAMILY MEMBERS RELATED ONLY THROUGH MARRIAGE SUCH AS STEPMOTHER, STEPSISTER OR ADOPTED SISTERS OR DAUGHTERS)

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

5.2 A mammogram is an x-ray of each breast to look for breast cancer. In the PAST YEAR, has a doctor or other health professional recommended breast cancer screening such as a mammogram or a breast exam?

- 1 Yes
- 2 No
- 3 No doctor visit in past twelve months
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

5.3 Have you ever had a mammogram?

- |           |   |                     |
|-----------|---|---------------------|
| GO TO 5.7 | 1 | YES                 |
|           | 2 | NO                  |
|           | 7 | DON'T KNOW/NOT SURE |
|           | 8 | REFUSED             |
|           | 9 | NA                  |



5.4 How long has it been since you had your last mammogram? (READ ONLY IF NECESSARY)

- 1 Within the past year (<12 MONTHS AGO)
- 2 Within the past 2 years ( $\geq 1$  YEAR BUT < 2 YEARS AGO)
- 3 Within the past 3 years ( $\geq 2$  YEARS BUT < 3 YEARS AGO)
- 4 Within the past 5 years ( $\geq 3$  YEARS BUT < 5 YEARS AGO)
- 5 5 or more years ago
- 6 Never
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

5.5 Was your (most recent) mammogram done as part of a routine checkup, because of a breast problem other than cancer, or because you've already had breast cancer?

- 1 ROUTINE CHECKUP
- 2 BREAST PROBLEM OTHER THAN CANCER
- 3 HAD BREAST CANCER
- 4 OTHER REASON \_\_\_\_\_
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

5.6 You said your most recent mammogram was {INSERT TIME FRAME FROM 5.4}. How long before that mammogram was the previous one?

- 1 A year or less before
- 2 More than 1 but not more than 2 years before
- 3 More than 2 but not more than 5 years before
- 4 Over 5 years before
- 5 None before the most recent
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

|                                                                           |
|---------------------------------------------------------------------------|
| <b>IF RESPONDENT HAS HAD TEST IN PAST TWO YEARS (Q 5.4) SKIP TO Q5.8.</b> |
|---------------------------------------------------------------------------|

5.7 What is the most important reason why you have NEVER had /NOT had a mammogram in the past two years? (READ ONLY IF NECESSARY– RECORD ALL RESPONSES NOTED BY RESPONDENT.)

- 01 No reason/never thought about it
- 02 Didn't need it/didn't know I needed this type of test
- 03 Doctor didn't order it/didn't say I needed it
- 04 Haven't had any problems
- 05 Put it off/didn't get around to it
- 06 Too expensive/no insurance/cost
- 07 Too painful, unpleasant, or embarrassing
- 08 Don't have doctor
- 09 Didn't want to know if I had cancer
- 10 Other, SPECIFY: \_\_\_\_\_
- 77 DON'T KNOW/NOT SURE
- 88 REFUSED
- 99 NA

5.8 A Pap test is a routine test for cancer of the cervix in which the doctor examines the cervix, takes a cell sample from the cervix with a small stick or brush, and sends it to the lab. In the PAST YEAR, has a doctor or other health professional RECOMMENDED that you have a Pap test?

- 1 Yes
- 2 No
- 3 No doctor visit in the past 12 months
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

5.9 Have you ever had a Pap test?

|                   |   |                     |
|-------------------|---|---------------------|
| <b>GO TO 5.12</b> | 1 | YES                 |
|                   | 2 | NO                  |
|                   | 7 | DON'T KNOW/NOT SURE |
|                   | 8 | REFUSED             |
|                   | 9 | NA                  |

5.10 How long has it been since you had your last Pap test? (READ ONLY IF NECESSARY)

- 1 Within the past year (<12 MONTHS AGO)
- 2 Within the past 2 years ( $\geq$ 1 YEAR BUT < 2 YEARS AGO)
- 3 Within the past 3 years ( $\geq$ 2 YEARS BUT < 3 YEARS AGO)
- 4 Within the past 5 years ( $\geq$ 3 YEARS BUT < 5 YEARS AGO)
- 5 5 or more years ago
- 6 Never
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

5.11. You said your most recent Pap test was {INSERT TIME FRAME FROM 5.10}.  
How long before that Pap test was the previous one?

- 1 A year or less before
- 2 More than 1 but not more than 2 years before
- 3 More than 2 but not more than 3 years before
- 4 More than 3 but not more than 5 years before
- 5 Over 5 years before
- 6 None before the most recent
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

**IF RESPONDENT HAS HAD PAP IN PAST 3 YEARS (Q 5.10) SKIP TO Q5.13.**

5.12 What is the most important reason you have {NEVER had a  
Pap test /NOT had a Pap test in the last 3 years}? (READ ONLY IF  
NECESSARY– RECORD ALL RESPONSES NOTED BY RESPONDENT.)

- 01 No reason/never thought about it.
- 02 Didn't need/didn't know I needed this type of test
- 03 Doctor didn't order it/didn't say I needed it
- 04 Haven 't had any problems
- 05 Put it off/didn't get around to it
- 06 Too expensive/no insurance/cost
- 07 Too painful, unpleasant, or embarrassing
- 08 Had hysterectomy
- 09 Don't have doctor
- 10 Didn't want to know if I had cancer
- 11 Other , SPECIFY: \_\_\_\_\_
- 77 DON 'T KNOW /NOT SURE
- 88 REFUSED
- 99 NA

5.13 Have you had a hysterectomy, that is an operation to remove the uterus (womb)?

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

## SECTION 6: ORAL HEALTH/ORAL CANCER

Next we'll talk about your dental care and oral cancer.

6.1 How long has it been since you last visited a dentist or a dental clinic for any reason?  
(READ ONLY IF NECESSARY)

INCLUDE VISITS TO DENTAL SPECIALISTS SUCH AS ORTHODONTISTS

- 1 Within the past year (<12 MONTHS AGO)
- 2 Within the past 2 years ( $\geq 1$  YEAR BUT < 2 YEARS AGO)
- 3 Within the past 3 years ( $\geq 2$  YEARS BUT < 3 YEARS AGO)
- 4 Within the past 5 years ( $\geq 3$  YEARS BUT < 5 YEARS AGO)
- 5 5 or more years ago
- 6 Never
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

6.2 Have you ever had a test or exam for oral or mouth cancer in which the doctor or dentist pulls on your tongue, sometimes with gauze wrapped around it, and feels under the tongue and inside the cheeks?

- |               |   |                     |
|---------------|---|---------------------|
|               | 1 | I THINK SO          |
|               | 2 | YES                 |
|               | 3 | NO                  |
| GO TO Q 7.1 ← | 7 | DON'T KNOW/NOT SURE |
|               | 8 | REFUSED             |

6.3 When did you have your most recent oral or mouth cancer exam?

- 1 Within the past year (<12 MONTHS AGO)
- 2 Within the past 2 years ( $\geq 1$  YEAR BUT < 2 YEARS AGO)
- 3 Within the past 3 years ( $\geq 2$  YEARS BUT < 3 YEARS AGO)
- 4 Within the past 5 years ( $\geq 3$  YEARS BUT < 5 YEARS AGO)
- 5 5 or more years ago
- 6 Never
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

6.4 What type of medical care person examined you when you had your last check-up for oral cancer? (READ CHOICES)

- 1 Doctor/physician
- 2 Nurse/Nurse Practitioner
- 3 Dentist
- 4 Dental Hygienist
- 5 Other, (SPECIFY \_\_\_\_\_)
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

## SECTION 7: DEMOGRAPHICS

7.1 What is your age?

\_\_\_\_ \_ (Code age in years)

|   |   |   |                     |
|---|---|---|---------------------|
| 7 | 7 | 7 | DON'T KNOW/NOT SURE |
| 8 | 8 | 8 | REFUSED             |

7.2 Are you Hispanic and/or Latino?

|   |                     |
|---|---------------------|
| 1 | YES                 |
| 2 | NO                  |
| 7 | DON'T KNOW/NOT SURE |
| 8 | REFUSED             |

7.3 Which one or more of the following would you say is your race? (MARK ALL THAT APPLY).

|   |                                           |
|---|-------------------------------------------|
| 1 | White                                     |
| 2 | Black or African American                 |
| 3 | Asian                                     |
| 4 | Native Hawaiian or Other Pacific Islander |
| 5 | American Indian, Alaska Native or         |
| 6 | Other (SPECIFY _____)                     |
| 7 | DON'T KNOW/NOT SURE                       |
| 8 | REFUSED                                   |

|                                                                      |
|----------------------------------------------------------------------|
| IF MORE THAN ONE RESPONSE TO Q 7.3. CONTINUE. OTHERWISE. GO TO Q 7.5 |
|----------------------------------------------------------------------|

7.4 Which one of these groups would you say **best** represents your race?

|   |                                           |
|---|-------------------------------------------|
| 1 | White                                     |
| 2 | Black or African American                 |
| 3 | Asian                                     |
| 4 | Native Hawaiian or Other Pacific Islander |
| 5 | American Indian, Alaska Native or         |
| 6 | Other (SPECIFY _____)                     |
| 7 | DON'T KNOW/NOT SURE                       |
| 8 | REFUSED                                   |
| 9 | NA                                        |

7.5 Are you:

|   |                                  |
|---|----------------------------------|
| 1 | Married                          |
| 2 | Divorced                         |
| 3 | Widowed                          |
| 4 | Separated                        |
| 5 | Never Married                    |
| 6 | A partner of an unmarried couple |
| 7 | DON'T KNOW                       |
| 8 | REFUSED                          |

7.6 How many members of your household, **including yourself**, are 18 years of age or older?

\_\_\_\_ NUMBER OF ADULTS  
7 7 DON'T KNOW  
8 8 REFUSED

7.7 How many children less than 18 years of age live in your household ?

\_\_\_\_ NUMBER OF CHILDREN  
0 0 NONE  
7 7 DON'T KNOW  
8 8 REFUSED

7.8 What is the highest grade or year of school you completed?  
(READ ONLY IF NECESSARY)

01 Never attended school or only attended kindergarten  
02 Grades 1 through 8 (Elementary)  
03 Grades 9 through 11 (Some high school)  
04 Grade 12 or GED (High school graduate)  
05 College 1 year to 3 years (Some college or technical school)  
06 College 4 years (College graduate)  
07 Master's Degree  
08 Advanced professional or doctoral degree  
77 DON'T KNOW  
88 REFUSED

7.9 Are you currently:

01 Employed for wages  
02 Self-employed  
03 Out of work for more than 1 year  
04 Out of work for less than 1 year  
05 A Homemaker  
06 A Student  
07 Retired or  
08 Unable to work  
77 DON'T KNOW  
88 REFUSED

7.10 Is your annual household income from all sources . . .

**IF RESPONDENT REFUSES AT ANY INCOME LEVEL, CODE '99  
REFUSED'**

READ AS APPROPRIATE

- 0 4 Less than \$25,000 [IF "NO," ASK 05; IF "YES," ASK 03]  
(\$20,000 TO LESS THAN \$25,000)
- 0 3 Less than \$20,000 [IF "NO," CODE 04; IF "YES," ASK 02]  
(\$15,000 TO LESS THAN \$20,000)
- 0 2 Less than \$15,000 [IF "NO," CODE 03; IF "YES," ASK 01]  
(\$10,000 TO LESS THAN \$15,000)
- 0 1 Less than \$10,000 [IF "NO," CODE 02]
- 0 5 Less than \$35,000 [IF "NO," ASK 06]  
(\$25,000 TO LESS THAN \$35,000)
- 0 6 Less than \$50,000 [IF "NO," ASK 07]  
(\$35,000 TO LESS THAN \$50,000)
- 0 7 Less than \$75,000 [IF "NO," CODE 08]  
(\$50,000 TO LESS THAN \$75,000)
- 0 8 \$75,000 or more
- 7 7 DON'T KNOW/NOT SURE
- 8 8 REFUSED

7.11 About how much do you weigh without shoes? ROUND FRACTIONS UP

\_\_\_ \_\_\_ pounds OR \_\_\_ \_\_\_ kilos

- 7 7 7 DON'T KNOW/NOT SURE
- 8 8 8 REFUSED

7.12 About how tall are you without shoes? ROUND FRACTIONS DOWN

\_\_\_ \_\_\_ / \_\_\_ \_\_\_ ft/inches OR \_\_\_ \_\_\_ centimeters

- 7 7 7 7 DON'T KNOW/NOT SURE
- 8 8 8 8 REFUSED

7.13 What county do you live in? \_\_\_\_\_ CODE \_\_\_ \_\_\_

**IF RESPONSE IS "BALTIMORE" PROBE FOR COUNTY OR CITY.**

- 7 7 7 DON'T KNOW/NOT SURE
- 8 8 8 REFUSED

7.14 Do you have more than one telephone number in your household? Do not include cell phones or numbers that are only used by a computer or fax machine.

|               |   |                     |
|---------------|---|---------------------|
| GO TO Q7.16 ← | 1 | YES                 |
|               | 2 | NO                  |
|               | 7 | DON'T KNOW/NOT SURE |
|               | 8 | REFUSED             |

7.15 How many of these are residential numbers?

- RESIDENTIAL TELEPHONE NUMBERS [6=6 OR MORE]
- |   |                     |
|---|---------------------|
| 7 | DON'T KNOW/NOT SURE |
| 8 | REFUSED             |
| 9 | NA                  |

**FEMALES ONLY: IF RESPONDENT IS 49 YEARS OLD OR OLDER SKIP TO NEXT SECTION**

7.16 To your knowledge, are you now pregnant?

- |   |                     |
|---|---------------------|
| 1 | YES                 |
| 2 | NO                  |
| 7 | DON'T KNOW/NOT SURE |
| 8 | REFUSED             |
| 9 | NA                  |

## SECTION 8: EXERCISE/PHYSICAL ACTIVITY

The next series of questions are about exercise and physical activities

**IF "EMPLOYED" OR "SELF-EMPLOYED" TO Q 7.9, CONTINUE. OTHERWISE GO TO Q 8.2**

8.1 When you are at work, which of the following best describes what you do?  
Would you say . . . (IF RESPONDENT HAS MULTIPLE JOBS, INCLUDE ALL JOBS.)

- |   |                                                 |
|---|-------------------------------------------------|
| 1 | Mostly sitting or standing                      |
| 2 | Mostly walking or                               |
| 3 | Mostly heavy labor or physically demanding work |
| 7 | DON'T KNOW/NOT SURE                             |
| 8 | REFUSED                                         |
| 9 | NOT APPLICABLE                                  |

8.2 We are interested in two types of physical activity: vigorous and moderate.  
Vigorous activities cause large increases in breathing or heart rate while  
moderate activities cause small increases in breathing or heart rate.

Now, thinking about the moderate physical activities you do **[FILL IN (when you are not working) IF "EMPLOYED" OR "SELF-EMPLOYED" TO CORE Q7.9]** in a usual week, do you do moderate activities for 10 or more minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes small increases in breathing or heart rate?

**SKIP TO 8.5**

- |   |                     |
|---|---------------------|
| 1 | YES                 |
| 2 | NO                  |
| 7 | DON'T KNOW/NOT SURE |
| 8 | REFUSED             |



8.3. How many days per week do you do these moderate activities for 10 or more minutes at a time?

\_\_\_ Days per week

- 66 DO NOT DO ANY MODERATE PHYSICAL ACTIVITY FOR 10 OR MORE MINUTES AT A TIME **GO TO 8.5**
- 77 DON'T KNOW/NOT SURE
- 88 REFUSED
- 99 NA

8.4. On days when you do moderate activities for 10 or more minutes at a time, how much total time per day do you spend doing these activities?

\_\_\_ \_\_: \_\_\_ \_\_ Hours and minutes per day

- 7 7 7 7 DON'T KNOW/NOT SURE
- 8 8 8 8 REFUSED
- 9 9 9 9 NA

8.5 Now thinking about the vigorous physical activities you do **[FILL IN (when you are not working) IF "EMPLOYED" OR "SELF-EMPLOYED" TO CORE Q7.9]** in a usual week, do you do vigorous activities for 20 or more minutes at a time, such as running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate?

**SKIP TO 8.8**

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

8. 6. How many days per week do you do these vigorous activities for 20 or more minutes at a time?

\_\_\_ DAYS PER WEEK

- 66 DO NOT DO ANY VIGOROUS PHYSICAL ACTIVITY FOR 20 OR MORE MINUTES AT A TIME (GO TO 8.8 IF APPROPRIATE)
- 77 DON'T KNOW/NOT SURE
- 88 REFUSED
- 99 NA

8.7. On days when you do vigorous activities for 20 or more minutes at a time, how much total time per day do you spend doing these activities?

\_\_\_ \_\_: \_\_\_ \_\_ HOURS AND MINUTES PER DAY

- 7 7 7 7 DON'T KNOW/NOT SURE
- 8 8 8 8 REFUSED
- 9 9 9 9 NA

**IF TOTAL FOR MODERATE PHYSICAL ACTIVITY IS LESS THAN 30 MINUTES/DAY/5 DAYS/WK AND 20 MINUTES OF VIGOROUS PHYSICAL ACTIVITY LESS THAN 3 DAYS/WEEK ASK 8.8. ALL OTHERS SKIP TO 8.9.**

8.8 I'm going to read you a list of reasons people give for not being physically active. Please tell me what is the **main** thing which prevents you most from doing more physical activity than you are currently doing:

- 1 A lack of motivation
- 2 A lack of time
- 3 A physical disability or other health limitation
- 4 There's no place to exercise
- 5 The cost is too high
- 6 Some other reason. (SPECIFY: \_\_\_\_\_)
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

8.9 During the PAST 12 MONTHS, did a doctor or other health care professional RECOMMEND that you BEGIN or CONTINUE to do any type of exercise or physical activity?

- 1 Yes
- 2 No
- 3 No doctor visit in past twelve months
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

## **SECTION 9: FRUITS AND VEGETABLES**

Now I'm going to ask you some questions about the foods you eat.

How many servings of the following foods do you eat per week or per day?

9.1 How many servings of fruit juices such as orange, grapefruit, or tomato do you drink per week or per day?( A serving is  $\frac{3}{4}$  cup or 6 ounces of juice.)

- 1 \_\_\_\_\_ PER DAY
- 2 \_\_\_\_\_ PER WEEK
- 4 4 4 LESS THAN ONCE PER WEEK
- 5 5 5 NEVER
- 7 7 7 DON'T KNOW/NOT SURE
- 8 8 8 REFUSED

9.2 How many servings of fruit (not including juices) do you eat per week or per day? ( A serving is on piece of fruit or a ½ cup of fruit)

1    \_\_\_  \_\_\_  PER DAY  
2    \_\_\_  \_\_\_  PER WEEK  
  
4   4   4   LESS THAN ONCE PER WEEK  
5   5   5   NEVER  
7   7   7   DON'T KNOW/NOT SURE  
8   8   8   REFUSED

9.3 How many servings of leafy salad greens do you eat per week or per day? (A serving is 1 cup of leafy salad greens)

1    \_\_\_  \_\_\_  PER DAY  
2    \_\_\_  \_\_\_  PER WEEK  
  
4   4   4   LESS THAN ONCE PER WEEK  
5   5   5   NEVER  
7   7   7   DON'T KNOW/NOT SURE  
8   8   8   REFUSED

9.4 How many servings of vegetables (not including salad or potatoes) do you eat per week or per day? ( A serving is ½ cup of vegetables)

1    \_\_\_  \_\_\_  PER DAY  
2    \_\_\_  \_\_\_  PER WEEK  
  
4   4   4   LESS THAN ONCE PER WEEK  
5   5   5   NEVER  
7   7   7   DON'T KNOW/NOT SURE  
8   8   8   REFUSED

9.5 Not including seafood or poultry, how many servings of meat such as beef, pork, lamb or veal do you eat per day or per week. Please include foods that are made with meat such as soups, stews, sandwiches, lunch meats, and casseroles. (a serving size of meat is about the size of a deck of cards.)

1    \_\_\_  \_\_\_  PER DAY  
2    \_\_\_  \_\_\_  PER WEEK  
  
4   4   4   LESS THAN ONCE PER WEEK  
5   5   5   NEVER  
7   7   7   DON'T KNOW/NOT SURE  
8   8   8   REFUSED

9.6 How many total servings of fruits and vegetables do you eat each day?

|\_\_\_|\_\_\_|    NUMBER OF SERVINGS/DAY  
5 5        NEVER  
7 7        DON'T KNOW/NOT SURE  
8 8        REFUSED

## SECTION 10: Weight Control

10.1 Are you now trying to lose weight?

**GO TO Q 10.3**

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

10.2 Are you now trying to maintain your current weight, that is to keep from gaining weight?

**GO TO Q10.7**

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NOT APPLICABLE

10.3 To lose weight (if "Yes" on Q10.1) OR  
To keep from gaining weight (if "Yes" on Q10.2)  
Are you . . . . .

- 1 Eating fewer calories
- 2 Eating less fat
- 3 Eating fewer calories and less fat
- 4 Neither
- 7 DON'T KNOW
- 8 REFUSED
- 9 NOT APPLICABLE

10.4 Are you following a particular diet plan to . . . .

lose weight? [if "Yes" on Q10.1]  
keep from gaining weight? [if "Yes" on Q10.2]

**GO TO Q 10.6**

- 1 YES
- 2 NO
- 7 DON'T KNOW
- 8 REFUSED
- 9 NOT APPLICABLE

10.5 Which of the following best describes the diet plan you are currently following?

- 01 Atkins diet
- 02 DASH diet
- 03 Zone diet
- 04 Pritikin diet
- 05 South Beach diet
- 06 Diabetic diet
- 07. Weight watchers
- 08 Other: Specify \_\_\_\_\_
- 77 DON'T KNOW
- 88 REFUSED
- 99 NOT APPLICABLE

10.6 Are you using physical activity or exercise to...

lose weight? [if "Yes" on Q10.1]

keep from gaining weight? [if "Yes" on Q10.2]

- 1 YES
- 2 NO
- 7 DON'T KNOW
- 8 REFUSED
- 9 NOT APPLICABLE

10.7 How much would you like to weigh?

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

pounds

OR

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

kilos

DON'T KNOW = 777

REFUSED = 888

10.8 In the past 12 months, has a doctor, nurse, or other health professional given you advice about your weight?

- 1 Yes, lose weight
- 2 Yes, gain weight
- 3 Yes, maintain current weight
- 4 No
- 7 DON'T KNOW
- 8 REFUSED

## SECTION 11: ALCOHOL CONSUMPTION

11.1 A drink of alcohol is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail, or 1 shot of liquor. During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage?

1 \_\_\_ Days per week

2 \_\_\_ Days in past 30

**GO TO Q 12.1**

0 0 NO DRINKS IN PAST 30 DAYS

7 7 DON'T KNOW/NOT SURE

8 8 REFUSED

11.2 On the days when you drank, about how many drinks did you drink on the average?

- |     |     |                     |
|-----|-----|---------------------|
| ___ | ___ | Number of drinks    |
| 7   | 7   | DON'T KNOW/NOT SURE |
| 8   | 8   | REFUSED             |
| 9   | 9   | NA                  |

11.3 Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks on an occasion?

\_\_\_\_ Number of times

|   |   |                     |
|---|---|---------------------|
| 0 | 0 | NONE                |
| 7 | 7 | DON'T KNOW/NOT SURE |
| 8 | 8 | REFUSED             |
| 9 | 9 | NA                  |

## SECTION 12: TOBACCO USE

12.1 Have you smoked at least 100 cigarettes in your entire life?  
(5 Packs = 100 cigarettes)

|                   |   |                     |
|-------------------|---|---------------------|
| <b>GO TO 13.1</b> | 1 | YES                 |
|                   | 2 | NO                  |
|                   | 7 | DON'T KNOW/NOT SURE |
|                   | 8 | REFUSED             |

12.2 Do you now smoke cigarettes every day, some days, or not at all?

|                   |   |                     |
|-------------------|---|---------------------|
| <b>GO TO 12.3</b> | 1 | EVERY DAY           |
|                   | 2 | SOME DAYS           |
| <b>GO TO 12.6</b> | 3 | NOT AT ALL          |
|                   | 7 | DON'T KNOW/NOT SURE |
|                   | 8 | REFUSED             |
|                   | 9 | NA                  |

12.3. On the average, about how many cigarettes do you now smoke per day, per week, or per month?

**INTERVIEWER NOTE:** 1 PACK = 20 CIGARETTES. IF 76 OR MORE CIGARETTES REPORTED, ENTER 76.

| NUMBER OF CIGARETTES |           |                     |
|----------------------|-----------|---------------------|
| 1                    | per day   |                     |
| 2                    | per week  |                     |
| 3                    | per month |                     |
| 7                    | 7         | DON'T KNOW/NOT SURE |
| 8                    | 8         | REFUSED             |
| 9                    | 9         | NA                  |

12.4. How soon after you wake up do you smoke your first cigarette?

|   |                         |
|---|-------------------------|
| 1 | Within 5 minutes        |
| 2 | 6-30 minutes            |
| 3 | 31 minutes – 60 minutes |
| 4 | After 60 minutes        |
| 7 | DON'T KNOW              |
| 8 | REFUSED                 |
| 9 | NA                      |

12.5 During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?

|                   |   |                     |
|-------------------|---|---------------------|
| <b>GO TO 12.7</b> | 1 | YES                 |
|                   | 2 | NO                  |
| <b>GO TO 12.8</b> | 7 | DON'T KNOW/NOT SURE |
|                   | 8 | REFUSED             |
|                   | 9 | NA                  |

12.6 About how long has it been since you last smoked cigarettes regularly, that is, daily?

(READ ONLY IF NECESSARY)

|                                |    |                                                       |
|--------------------------------|----|-------------------------------------------------------|
| <b>GO TO 12.7 &amp; 12.8</b>   | 1  | Within the past month (anytime less than 1 month)     |
|                                | 2  | Within the past 3 months (1 mo. to less than 3 mo)    |
|                                | 3  | Within the past 6 months (3 mo. to less than 6 mo.)   |
|                                | 4  | Within the past year (6 mo. but less than 12 mo.)     |
| <b>GO TO Q.12.7 &amp; 13.1</b> | 5  | Within the past 5 years (1 yr but less than 5 yrs)    |
|                                | 6  | Within the past 15 years (5 yrs but less than 15 yrs) |
|                                | 7  | 15 years ago or more                                  |
|                                | 77 | DON'T KNOW                                            |
|                                | 88 | REFUSED                                               |
|                                | 99 | NA                                                    |

12.7 Which of the following methods did you use to stop smoking the last time you stopped? (IF MORE THAN ONE ASK TO SPECIFY ONE THAT WAS MOST EFFECTIVE).

- 1 "Cold Turkey", quit on your own without help
- 2 Nicotine replacement (patch, gum, inhaler or nasal spray).
- 3 Non-nicotine medication (Zyban or Bupropion)
- 4 Behavioral therapy alone, no medication
- 5 Alternative therapy such as acupuncture, hypnosis or an herbal remedy
- 6 Other: Specify \_\_\_\_\_
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

12.8. (ASK ALL CURRENT SMOKERS {Q12.2} AND ALL PAST SMOKERS WHO QUIT WITHIN THE PAST YEAR {12,6}) In the past 12 months, did a doctor, nurse, or other health professional advise you to quit smoking?

- 1 YES
- 2 NO
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED
- 9 NA

## **SECTION 13: OTHER TOBACCO PRODUCTS**

13.1 Do you currently use chewing tobacco, snuff or dip every day, some days, or not at all?

- 1 EVERY DAY
- 2 SOME DAYS
- 3 NOT AT ALL
- 7 DON'T KNOW/NOT SURE
- 8 REFUSED

## **CLOSING STATEMENT**

That completes the interview. Everyone's answers will be combined to give us information about the health practices of people aged 40 and over in the state of Maryland. Thank you very much for participating in this important survey.