Maryland Cancer Survey, 2004

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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Highlights

- Compared to Healthy People 2010 objectives:
  - Maryland **exceeds** the 2010 objectives:
    - 63% of Marylanders ≥ 50 years of age report they have ever had a colonoscopy or sigmoidoscopy.
    - 83% of Maryland women ≥ 40 years of age report having had a mammogram in the past 2 years.
    - 90% of Maryland women ≥ 40 years of age report having had a Pap smear in the past 3 years.
    - 34% of Marylanders ≥ 40 years of age report having had an oral cancer screening in the past year.
    - 38% of Marylanders ≥ 40 years of age engage in moderate physical activity for at least 30 minutes a day for 5-7 days a week.

  - Marylanders, age 40 years and older, do **not** meet the 2010 objectives for the following cancer risk factors:
    - Smoking (18% of Marylanders age 40 years and older report current cigarette use.)
    - Fruit and vegetable consumption (Only 35% of Marylanders ≥ 40 years of age reported eating the recommended five or more servings per day.)
    - Percent of the population who has a "normal" body mass index (38% of Marylanders ≥ 40 years of age were overweight and 29% were obese.)

- African Americans were **significantly less likely** than the white population to:
    - Have had oral cancer screening (31% vs. 48%)
    - Have had colonoscopy or sigmoidoscopy (58% vs. 66%)

- Cancer screenings generally increased with:
  - increasing age
  - higher education levels
  - higher income levels
  - having health insurance
  - having a primary health care provider
  - having had a physical exam in the past two years

- 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 CRC and prostate cancer.

- Strengths of the Maryland Cancer Survey (MCS) include:
    - Population-based sample, weighted to the Maryland population, using methods similar to the national Behavioral Risk Factor Surveillance System survey
    - A large sample size focusing on Marylanders who were 40 years of age and older

- Limitations of the MCS include:
    - Telephone survey using only land-line numbers, not cell phones
    - Only took responses from those who spoke English
    - Only surveyed those who lived in residences and not the institutionalized population

Chapter 1. Introduction

This document contains the results of the second Maryland Cancer Survey (MCS), which was conducted in 2004. The MCS has been commissioned by the Surveillance and Evaluation Unit of the Center for Cancer Surveillance and Control, Maryland Department of Health and Mental Hygiene (DHMH) 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 survey was performed by the Department of Epidemiology and Preventive Medicine at the University of Maryland, Baltimore (UMB), School of Medicine. Comparisons are made to the objectives established in Healthy People 2010 (HP 2010),[1] to the results obtained in the MCS 2002,[2] 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 in the last 10 years, dropping from being first in the United States in cancer mortality in 1991 to 13th for the time period 1997-2001. 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.[3]

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

[1] Healthy People 2010, http://www.healthypeople.gov/document/
[2] Report of the Maryland Cancer Survey, 2002, http://www.fha.state.md.us/cancer/pdf/MCS_Report_2002-V3.pdf
[3] Annual Cancer Report, Cigarette Restitution Fund Program, September 2004, Maryland Department of Health and Mental Hygiene. http://www.fha.state.md.us/cancer/html/crf_ann_can_rpt.html

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

2.1 Survey Design

The Maryland Cancer Survey (MCS) 2004 was conducted as a population-based, random digit dial, computerized 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).[1] The MCS respondents were limited to persons 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 did not speak English, those who were unable to communicate because of a physical or mental impairment, and those living in group homes or institutions.

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, Inc. provided a pool of 80,000 random telephone numbers. The rural area was oversampled, making up 31% 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 2/3 the rate of the listed one-plus telephone numbers.

2.2 MCS 2004 Questionnaire

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

[1] Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, User Guide, http://www.cdc.gov/brfss/pdf/userguide.pdf

2.3 Data Collection

As in 2002, REDA, International, a survey and research firm located in Wheaton, Maryland, conducted the MCS 2004 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-residences 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 healthcare.

Sixty-six thousand nine hundred fifty (66,950) telephone numbers were screened or called. Of these 5,007 phone numbers resulted in completed interviews (7.5%), 30.5% were non-working numbers, 14.2% were phone numbers of a business or institution, 19.1% were an answering machine, fax modem, or no answer, 10.8% resulted in partial interviews, and 7.0% refused the interview. Approximately 0.6% of phone numbers were ineligible because the residents spoke only Spanish and 0.5% of the numbers were ineligible due to other language barriers. The remaining phone numbers (9.8%) were ineligible for a variety of reasons. The CASRO response rate, defined as Completed Interviews/(Known Eligible + Presumed Eligible), was 38.3%. The completion rate, defined as Completed Interviews/Known Eligible, was 73.2%.

2.4 Data Analysis

A final weight was assigned to each respondent, according to the BRFSS weighting protocol.[2] Respondents who refused to report race or gender were omitted from the analysis, since race and gender were required for weighting. The entire records for three respondents were deleted from this analysis for refusal to report race, resulting in a final analytic sample of 5,004. For 60 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 based on the number of people in Maryland in age-race-gender categories for each geographic stratum. Respondents were asked to list their race as white, black or African American, Asian, native Hawaiian or other Pacific Islander, American Indian or Alaskan 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/African American were grouped together as people of other races. The age strata consisted of five-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

[2] Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, Weighting formula, http://www.cdc.gov/brfss/technical_infodata/weighting.htm

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 population.

For all demographic variables except income, there were 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 person, divorced or separated, widowed, and never married. Education levels were combined into five categories: less than high school, high school graduate or graduate equivalent 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). 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 and above.

Respondents were asked whether they had ever received various tests that are done 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.

Results in the tables are based on the number of respondents that answered a question. Analyses presented on oral cancer screening include responses from men and women age 40 years and older. The section on breast cancer screening includes responses from women age 40 years and older, while the section on cervical cancer screening includes women age 40 years and older who did not report having had a hysterectomy. Analysis of colorectal cancer (CRC) screening questions (fecal occult blood test, sigmoidoscopy, and colonoscopy) contains responses of men and women age 50 years and older. Questions about knowledge of CRC screening were analyzed for the entire sample, age 40 years and older. Tables describing prostate cancer screening with prostate specific antigen (PSA) testing and digital rectal exam (DRE) includes responses from African American men age 45 years and older and white men and men of other races age 50 years and older. The table describing discussions with a health care provider about prostate cancer screening includes the entire sample of men age 40 years and older. The time period since the last screening episode was asked for each screening test so that we could determine if 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.

The questions and the analyses about daily intake of fruit and vegetable consumption and about exercise and physical activity were changed between the 2002 and 2004 surveys. We have not made comparisons in this report between the results of fruit and vegetable intake and

physical activity in the MCS 2002 and 2004; such comparisons should be not be made because of the change in methods.

Statistical analyses (population-based numbers and proportions) were performed with weighted data using Stata Version 8. 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 proportion of the Maryland population based on the weighted sample who answered "yes" to the question or had that characteristic; 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 ≤ 0.05 for the selected characteristic. The symbol "^" shows that the differences were not statistically significant (i.e., p-value > 0.05.) 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.

Chapter 3. The Survey Sample

A total of 5,007 people were interviewed for the survey. The entire records for three people who refused to give their race were omitted from the dataset for analysis, leaving 5,004 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 2004 by area of residence; 64.6% of the survey respondents lived in urban areas of Maryland, 35.4% lived in rural areas. Urban respondents were weighted to 78.5% of the Maryland population and rural respondents were weighted to 21.5%.

Table 3-1. Sample percentage and weighted percentage of the urban and rural strata for the Maryland Cancer Survey, 2004.

	Sample N	Sample %	Weighted %
Total	5004	100.0%	100.0%
Urban	3234	64.6%	78.5%
Rural	1770	35.4%	21.5%

Table 3-2 shows the demographics of the sample, and the demographics after being weighted to the Maryland population. Whites comprised 75.5% of the sample, African Americans and blacks made up 20.9%, Asians comprised 1.5%, Hawaiian and Pacific Islanders made up 0.2%, Native American and Alaskan natives made up 0.8%, and other responses comprised 1.1% of the sample. ("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 Asians, Hawaiian and Pacific Islanders, Native American and Alaskan natives, and any other responses to the race question.) Whites were weighted to 71.3% of the population, African Americans were weighted to 24.3%, and people of other races were weighted to 4.4% of the population. Women made up 65.1% of the sample, and were weighted to 53.8%, 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 weighed percents. White women made up 48.3% of the sample, whereas they account for 37.7% of the Maryland population. (Chart 3-1). African American men made up 6.3% of the sample and are weighted to match 10.6% of the population. People age 65 years and older made up 31.5% of the sample, and are weighted to 25.8% of the population (Chart 3-2).

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

Chart 3-1 Comparison of the 2004 survey to Maryland's population by race and gender.

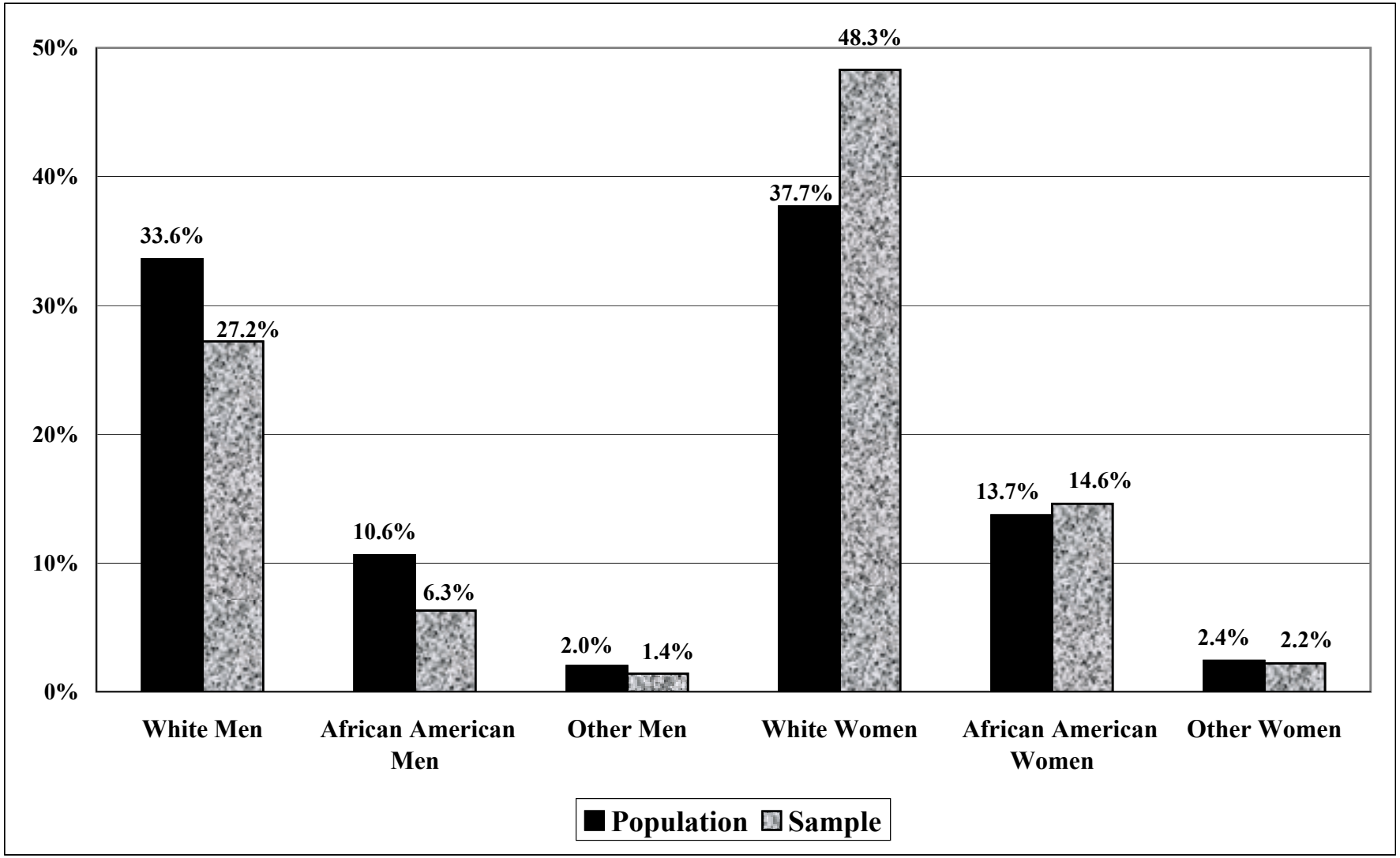


Chart 3-2 Comparison of the 2004 survey sample to Maryland's population by age.

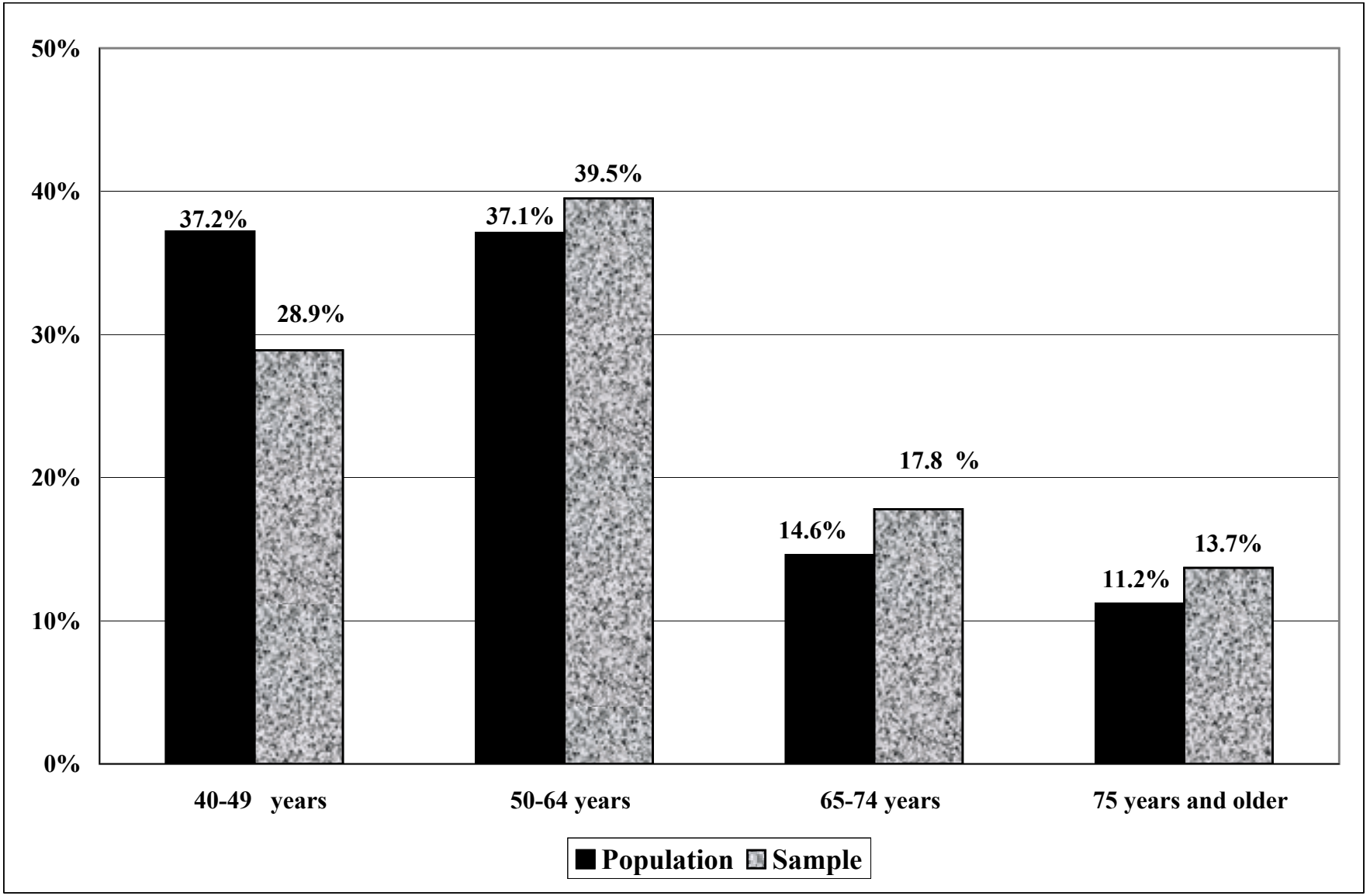


TABLE 3-2 DEMOGRAPHICS OF THE SURVEY SAMPLE, AGE 40 YEARS AND OLDER, WEIGHTED TO THE MARYLAND POPULATION, AGE 40 YEARS AND OLDER, MARYLAND CANCER SURVEY 2004

	TOTAL				URBAN				RURAL			
Selected Characteristic	**Sample N**	**Sample %**	**wt %**	**95% CI**	**Sample N**	**Sample %**	**wt %**	**95% CI**	**Sample N**	**Sample %**	**wt %**	**95% CI**
Gender												
Male	1745	34.9%	46.2%		1114	34.4%	45.8%		631	35.6%	47.7%	
Female	3259	65.1%	53.8%		2120	65.6%	54.2%		1139	64.4%	52.3%	
Age												
40-49 years	1448	28.9%	37.2%		965	29.8%	37.5%		483	27.3%	36.1%	
50-64 years	1978	39.5%	37.1%		1267	39.2%	37.3%		711	40.2%	36.5%	
65 -74 years	891	17.8%	14.6%		558	17.3%	14.3%		333	18.8%	15.5%	
75 years and older	687	13.7%	11.2%		444	13.7%	11.0%		243	13.7%	12.0%	
Race												
White	3779	75.5%	71.3%		2207	68.2%	66.8%		1572	88.8%	87.8%	
African American	1046	20.9%	24.3%		887	27.4%	28.0%		159	9.0%	10.9%	
Asian	77	1.5%	2.2%		69	2.1%	2.7%		8	0.5%	0.2%	
Hawaiian/Pacific Islander	10	0.2%	0.2%		4	0.1%	0.1%		6	0.3%	0.2%	
Native American/Alaskan Native	38	0.8%	0.7%		24	0.7%	0.8%		14	0.8%	0.4%	
Other	54	1.1%	1.3%		43	1.3%	1.6%		11	0.6%	0.4%	
Gender and Race												
White male	1360	27.2%	33.6%		793	24.5%	31.3%		567	32.0%	41.9%	
African American male	316	6.3%	10.6%		268	8.3%	12.1%		48	2.7%	5.2%	
Other male	69	1.4%	2.0%		53	1.6%	2.4%		16	0.9%	0.6%	
White female	2419	48.3%	37.7%		1414	43.7%	35.5%		1005	56.8%	46.0%	
African American female	730	14.6%	13.7%		619	19.1%	15.9%		111	6.3%	5.7%	
Other female	110	2.2%	2.4%		87	2.7%	2.8%		23	1.3%	0.7%	
Hispanic Ethnicity												
Yes	101	2.0%	2.5%	2.0-3.2%	76	2.4%	2.8%	2.2-3.7%	25	1.4%	1.5%	0.9-2.3%
No	4893	98.0%	97.5%	96.8-98.0%	3151	97.6%	97.2%	96.4-97.8%	1742	98.6%	98.5%	97.7-99.1%
Marital Status												
Married	2881	57.8%	65.9%	64.4-67.5%	1777	55.2%	64.6%	62.7-66.4%	1104	62.5%	70.9%	68.5-73.2%
Divorced	689	13.8%	11.1%	10.2-12.1%	473	14.7%	11.4%	10.3-12.6%	216	12.2%	10.0%	8.6-11.7%
Widowed	783	15.7%	10.0%	9.3-10.9%	497	15.4%	10.0%	9.1-11.0%	286	16.2%	10.1%	8.9-11.5%
Separated	135	2.7%	2.4%	2.0-3.0%	92	2.9%	2.5%	2.0-3.1%	43	2.4%	2.2%	1.5-3.3%
Never married	455	9.1%	9.3%	8.3-10.4%	348	10.8%	10.2%	9.0-11.5%	107	6.1%	6.1%	4.9-7.7%
Partner of unmarried couple	44	0.9%	1.2%	0.9-1.8%	35	1.1%	1.4%	1.0-2.0%	9	0.5%	0.7%	0.3-1.4%

Sample N-respondents in the sample with that characteristic
Sample %-percent in the sample with that characteristic.
The “wt %” for gender, age, race, and gender/race is equal to the actual population percent

TABLE 3-2 DEMOGRAPHICS OF THE SURVEY SAMPLE, AGE 40 YEARS AND OLDER, WEIGHTED TO THE MARYLAND POPULATION, AGE 40 YEARS AND OLDER, MARYLAND CANCER SURVEY 2004

	TOTAL				URBAN				RURAL			
Selected Characteristic	**Sample N**	**Sample %**	**wt %**	**95% CI**	**Sample N**	**Sample %**	**wt %**	**95% CI**	**Sample N**	**Sample %**	**wt %**	**95% CI**
Education												
Kindergarten or less	1	0.02%	0.03%	0.0-0.2%	1	0.03%	0.04%	0.0-0.3%	0	0.0%		
Grades 1-8	129	2.6%	2.2%	1.8-2.7%	72	2.2%	2.0%	1.6-2.6%	57	3.2%	2.7%	2.0-3.7%
Grades 9-11	312	6.3%	6.3%	5.5-7.2%	176	5.5%	5.9%	5.0-7.0%	136	7.7%	7.5%	6.2-9.1%
High school grad or GED	1457	29.3%	27.9%	26.4-29.4%	811	25.2%	25.4%	23.6-27.2%	646	36.6%	37.0%	34.5-39.7%
College 1-3 years	1117	22.4%	22.0%	20.7-23.4%	722	22.5%	22.1%	20.5-23.8%	395	22.4%	21.6%	19.5-23.9%
College grad	1118	22.5%	23.5%	22.1-25.0%	792	24.6%	24.6%	22.9-26.4%	326	18.5%	19.8%	17.7-22.1%
Master's degree	586	11.8%	12.3%	11.3-13.5%	435	13.5%	13.5%	12.2-14.9%	151	8.6%	8.3%	6.9-9.9%
Doctoral or advanced professional degree	256	5.1%	5.8%	5.0-6.7%	204	6.3%	6.5%	5.6-7.6%	52	2.9%	3.0%	2.2-4.1%
Employment Status												
Employed for Wages	2111	42.4%	47.6%	45.9-49.3%	1422	44.2%	48.6%	46.5-50.6%	689	39.1%	44.1%	41.4-46.8%
Self Employed	414	8.3%	9.1%	8.1-10.2%	259	8.1%	8.9%	7.7-10.2%	155	8.8%	9.8%	8.2-11.6%
Unemployed > 1 year	103	2.1%	2.3%	1.9-2.9%	79	2.5%	2.5%	2.0-3.3%	24	1.4%	1.6%	1.0-2.5%
Unemployed < 1 year	94	1.9%	2.3%	1.8-2.9%	64	2.0%	2.5%	1.8-3.3%	30	1.7%	1.6%	1.0-2.4%
Homemaker	301	6.0%	5.4%	4.8-6.1%	181	5.6%	5.1%	4.4-6.0%	120	6.8%	6.4%	5.3-7.7%
Student	13	0.3%	0.3%	0.1-0.6%	12	0.4%	0.3%	0.17-0.68%	1	0.1%	0.05%	0.0-0.4%
Retired	1729	34.7%	28.9%	27.5-30.3%	1069	33.2%	27.9%	26.3-29.7%	660	37.4%	32.4%	30.1-34.9%
Unable to work	215	4.3%	4.1%	3.5-4.9%	131	4.1%	4.2%	3.4-5.1%	84	4.8%	4.0%	3.1-5.2%
Household Income												
Less than $10,000	132	2.7%	2.0%	1.6-2.5%	79	2.5%	2.0%	1.6-2.6%	53	3.0%	1.9%	1.5-2.6%
$10,000-<$15,000	196	3.9%	3.1%	2.6-3.6%	111	3.4%	2.9%	2.3-3.6%	85	4.8%	3.5%	2.8-4.5%
$15,000-<$20,000	167	3.4%	2.8%	2.3-3.4%	103	3.2%	2.7%	2.1-3.4%	64	3.6%	3.3%	2.5-4.3%
$20,000-<$25,000	381	7.7%	6.8%	6.0-7.6%	218	6.8%	6.4%	5.5-7.5%	163	9.3%	8.0%	6.7-9.6%
$25,000-<$35,000	444	8.9%	7.9%	7.1-8.8%	277	8.6%	7.5%	6.6-8.6%	167	9.5%	9.5%	7.9-11.2%
$35,000-<$50,000	636	12.8%	12.1%	11.1-13.2%	380	11.8%	11.2%	10.1-12.5%	256	14.5%	15.4%	13.5-17.5%
$50,000-<$75,000	775	15.6%	16.5%	15.2-17.8%	494	15.3%	16.4%	14.9-17.9%	281	16.0%	16.8%	14.9-18.9%
$75,000 or greater	1424	28.6%	33.3%	31.7-34.9%	1009	31.3%	34.9%	33.0-36.9%	415	23.6%	27.2%	24.8-29.8%
Don't know/not sure	281	5.6%	5.2%	4.5-6.0%	185	5.7%	5.3%	4.5-6.3%	96	5.5%	4.7%	3.7-5.9%
Refused	543	10.9%	10.4%	9.4-11.4%	363	11.3%	10.6%	9.4-11.9%	180	10.2%	9.6%	8.2-11.3%

Sample N-respondents in the sample with that characteristic
Sample %-percent in the sample with that characteristic.
The “wt %” for gender, age, race, and gender/race is equal to the actual population percent

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

	Males		Females		Whites		African Americans/ Blacks		Other Race		Total	
Jurisdiction	n	%	n	%	n	%	n	%	n	%	n	percent of sample
Allegany	47	37.6%	78	62.4%	122	97.6%	1	0.8%	2	1.6%	125	2.5%
Anne Arundel	136	36.6%	236	63.4%	326	87.6%	35	9.4%	11	3.0%	372	7.5%
Baltimore City	112	27.9%	290	72.1%	155	38.6%	239	59.5%	8	2.0%	402	8.1%
Baltimore	199	33.6%	393	66.4%	470	79.4%	107	18.1%	15	2.5%	592	12.0%
Calvert	41	32.3%	86	67.7%	113	89.0%	10	7.9%	4	3.2%	127	2.6%
Caroline	13	31.0%	29	69.1%	38	90.5%	4	9.5%	0	0.0%	42	0.9%
Carroll	47	36.4%	82	63.6%	123	95.4%	3	2.3%	3	2.3%	129	2.6%
Cecil	42	35.0%	78	65.0%	113	94.2%	3	2.5%	4	3.3%	120	2.4%
Charles	60	42.6%	81	57.5%	107	75.9%	33	23.4%	1	0.7%	141	2.9%
Dorchester	24	42.9%	32	57.1%	42	75.0%	11	19.6%	3	5.4%	56	1.1%
Frederick	101	34.1%	195	65.9%	273	92.2%	17	5.7%	6	2.0%	296	6.0%
Garrett	19	30.7%	43	69.4%	62	100.0%	0	0.0%	0	0.0%	62	1.3%
Harford	51	31.1%	113	68.9%	144	87.8%	17	10.4%	3	1.8%	164	3.3%
Howard	66	33.7%	130	66.3%	168	85.7%	23	11.7%	5	2.6%	196	4.0%
Kent	12	41.4%	17	58.6%	23	79.3%	6	20.7%	0	0.0%	29	0.6%
Montgomery	294	38.1%	478	61.9%	609	78.9%	97	12.6%	66	8.6%	772	15.6%
Prince George's	209	35.5%	380	64.5%	205	34.8%	355	60.3%	29	4.9%	589	11.9%
Queen Anne's	22	37.9%	36	62.1%	48	82.8%	7	12.1%	3	5.2%	58	1.2%
St. Mary's	36	31.6%	78	68.4%	97	85.1%	13	11.4%	4	3.5%	114	2.3%
Somerset	17	43.6%	22	56.4%	32	82.1%	5	12.8%	2	5.1%	39	0.8%
Talbot	18	32.7%	37	67.3%	48	87.3%	7	12.7%	0	0.0%	55	1.1%
Washington	77	36.3%	135	63.7%	205	96.7%	5	2.4%	2	0.9%	212	4.3%
Wicomico	37	31.4%	81	68.6%	101	85.6%	17	14.4%	0	0.0%	118	2.4%
Worcester	46	36.5%	80	63.5%	108	85.7%	15	11.9%	3	2.4%	126	2.6%

Jurisdiction was not specified by 68 respondents.

Maryland Cancer Survey, 2004

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, both because of its incidence in Maryland and because CRC is amenable to prevention though screening and early detection. Colorectal cancer is the fourth most common cause of cancer (excluding non-melanoma skin cancer) in Maryland, behind prostate, female breast, and lung cancer. In 2001, it was the second leading cause of cancer deaths in Maryland.[1] Of the 50 states and the District of Columbia, Maryland had the 5th highest mortality rate from CRC cancer between 1997-2001. The three most commonly used tests for detecting pre-malignant lesions (i.e., benign adenomas) and invasive CRC are the fecal occult blood test (FOBT), sigmoidoscopy, and colonoscopy (sigmoidoscopy and colonoscopy are both "lower gastrointestinal (GI) endoscopies"). Public health programs were implemented during fiscal year (FY) 2001 for education about and screening for colorectal cancer 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.

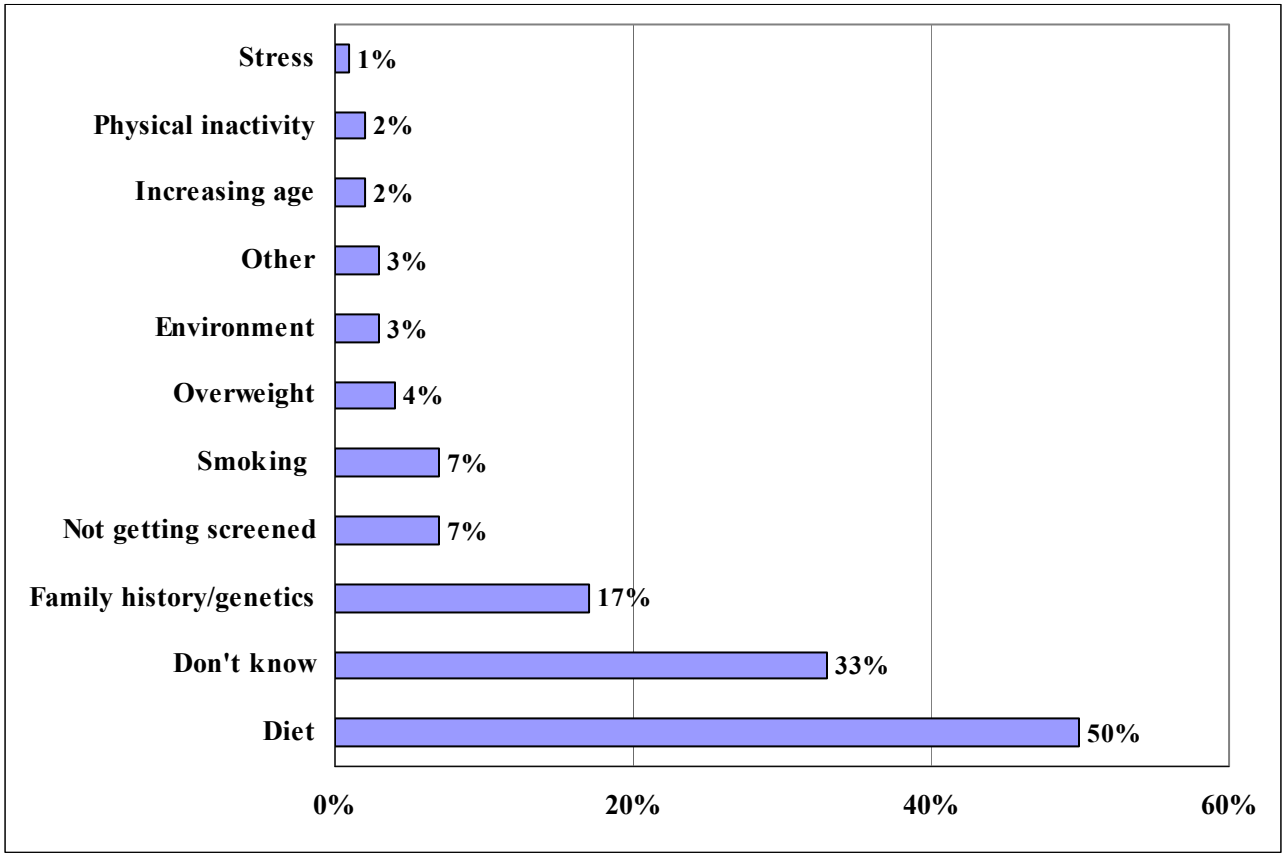
Factors that increase a person's risk of developing CRC include increasing age, having a personal history of CRC, adenomas, endometrial or ovarian cancer, having inflammatory bowel disease, having a first degree relative with CRC or adenomas, or having a genetic predisposition such as familial adenomatous polyposis or hereditary nonpolyposis colorectal cancer. Survey respondents were asked what factors they believe increase a person's risk of developing CRC (respondents were allowed to give more than one response). While 33% could not name any risk factors for CRC, 50% reported diet and 17% said that genetics or family history was involved (Chart 4-1). Only 2% named older age, which is one of the major risk factors for developing CRC and the reason that screening is recommended to begin at age 50 years.

Knowledge of CRC screening is high in Maryland (Table 4-1). Among all residents of Maryland age 40 years and older, 76% had heard of the home kit for the FOBT, while 91% had heard of lower GI endoscopy as a means of examining the colon. Eighty-six percent (86%) have seen or heard CRC screening promoted in the media or at a health care facility (Table 4-2). Only 24% reported having heard that the local health departments had no-cost screening for low income individuals; this figure was slightly lower than in 2002 (27%) (Table 12-1).

Fifty-four percent (54%) of Maryland adults age 50 years and older have ever performed a home FOBT (Table 4-3). Women were significantly more likely to have ever had an FOBT than men (57% compared to 51%), as were those persons 65 years and older (59%), compared to those 50-64 years (51%). Whites were more likely to have ever had an FOBT (57%) than either African Americans (50%) or persons of other races (35%). The proportion of people having had an FOBT increased as level of education increased, and people who were retired were more likely to have ever had the test. There were no trends noted by income.

[1] Annual Cancer Report, Cigarette Restitution Fund Program, September, 2004, Maryland Department of Health and Mental Hygiene http://www.fha.state.md.us/cancer/html/crf_ann_can_rpt.html

Chart 4-1 Perceived risk factors for development of colorectal cancer, as reported by survey respondents



The Healthy People 2010 goal is for 50% of people age 50 years and older to have an FOBT in the last two years. Only 36% of Marylanders age 50 years and older have had the test within the preceding two years (Table 4-4). Significant differences were noted by age, education, and employment status. People age 65 years and older were more likely to have the exam in the past two years than those 50-64 years (41% vs. 33%). Testing within the past two years increased as level of education increased and people who were retired were more likely to report having the test in the past two years.

Sixty-three percent (63%) of Marylanders age 50 years and older reported that they have ever had a lower GI endoscopy (Table 4-5). While there was no statistical difference for prevalence of lower GI endoscopy between urban and rural residents, differences were seen by almost all other demographic characteristics examined. Men reported having ever had a lower GI endoscopy more often than women (65% vs. 61%), but this difference was seen exclusively in urban areas. Those 50-64 years of age reported ever having had a lower GI endoscopic examination less often than those greater than 65 years of age (59% vs. 70%). Whites were significantly more likely to have ever had lower GI endoscopy (66%) than either African Americans (58%) or people of other races (47%). People that never married had lower rates of screening compared to those in the other marital categories. As with FOBT, higher educational

levels were statistically significantly associated with higher proportions of ever having had a lower GI endoscopic examination. People who are retired also reported higher rates of lower GI endoscopy. Higher percentages of screening were seen at higher annual income levels. Of those reporting they had ever had a lower GI endoscopy, the vast majority of people knew which test they had received most recently: 16% reported their most recent exam was a sigmoidoscopy and 84% replied it was a colonoscopy. Compared to the results of the 2002 survey, the proportion of people reporting their most recent exam was a colonoscopy increased by 8% in 2004 (Table 12-1).

Almost 23% of people age 50 years or older have never received either an FOBT or a lower GI endoscopy. When asked the most important reason for never having any of the CRC screening tests, 27% replied that the doctor either did not order the test or did not say the test was needed (Table 4-6). Other common reasons included 'no reason' or the person 'never thought of it' (22%), they didn't know the test was needed (17%), and they didn't have any problems (14%). Infrequently cited reasons (1-9%) included procrastination, the test is too expensive or they didn't have insurance, the test is too painful, unpleasant, or embarrassing, the person did not have a doctor, or the person had no family history of CRC or replied he was at low risk.

Receiving a recommendation from a health care provider (HCP) is a critical step in having CRC screening performed. When people reported that a health care provider had recommended that they have an FOBT in the last year, 63% had the exam, compared to only 6% having the exam in the last year when they said a HCP had not recommended the test. Among people who reported ever receiving a provider recommendation for lower GI endoscopy, 86% had the exam. Among those who said they did not receive a recommendation from a HCP, only 13% had the exam. Of the 37% of Marylanders age 50 years and older who have never had a lower GI endoscopy, 80% have had a routine check-up in the last year and 89% have had a routine check-up in the last two years.

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 colorectal cancer. Twelve percent (12%) of people, age 40 years and older, reported they had an FDR who had been diagnosed with colon cancer. Among people age 50 years and older, 75% of those reporting a FDR with CRC have ever had a lower GI endoscopic examination. This figure was significantly higher than the lower GI endoscopy rate among people without a FDR with CRC, which was 61%. Of those people age 50 years and older who reported having a FDR with CRC who have ever had a lower GI endoscopy, 88% had a colonoscopy as their most recent exam. Among people between the ages of 40 and 49 years, 45% who reported having a FDR with CRC have ever had a lower GI endoscopy, and of those, 90% report having had a colonoscopy as their most recent exam.

For people at average risk for developing CRC, the American Cancer Society (ACS) recommends one of the following screening modalities: annual FOBT, sigmoidoscopy every five years, sigmoidoscopy every five years with annual FOBT, or colonoscopy every ten years or double contrast barium enema (DCBE) every 5 years.[2] (Although the ACS recommendations include DCBE as a screening option for CRC, but this method was not included in the MCS

[2] American Cancer Society Cancer Detection Guidelines
http://www.cancer.org/docroot/PED/content/PED_2_3X_ACS_Cancer_Detection_Guidelines_36.asp?sitearea=PED

questionnaire or analysis.) Twenty-three percent (23%) of Marylanders over the age of 50 reported never having been screened by FOBT, sigmoidoscopy, or colonoscopy. Ten percent (10%) have been tested with either FOBT and/ or lower GI endoscopy but are not up-to-date by ACS guidelines. Of the remaining 67% who have had CRC testing and knew the types of procedures they had and the time elapsed since the most recent tests; 9% were up-to-date with FOBT only, 5% were up-to-date with sigmoidoscopy only, 3% had an FOBT in the last year and a sigmoidoscopy in the last 5 years, and 50% had a colonoscopy in the last 10 years (with or without ever having an FOBT).

Healthy People 2010 has set 50% as its goal for the adult population age 50 years and older for: 1) having had a FOBT in the last two years, and 2) ever having received a lower GI endoscopy.[3] Chart 4-2 shows how the current survey estimates compare to national and previous Maryland statewide surveys for CRC screening. While the percentage of people reporting having had an FOBT in the last two years has dropped since 2002 (44% in 2002 compared to 36% in 2004), the number reporting to have ever had a lower GI endoscopy has increased from 58% in 2002 to 63% in 2004. When looking at all three types of tests for CRC screening, it appears as though Marylanders may be moving away from FOBT and sigmoidoscopies in favor of colonoscopies. Colonoscopy, with or without FOBT, accounted for almost 75% of all up-to-date testing.

[3] Healthy People 2010, US Department of Health and Human Services, 2000
http://www.healthypeople.gov/document/HTML/Volume1/03Cancer.htm

TABLE 4-1 RESPONSES TO QUESTIONS ABOUT AWARENESS OF TESTS FOR COLORECTAL CANCER SCREENING, AMONG THOSE AGE 40 YEARS AND OLDER

	Heard of the home kit to test for blood in the stool ~					Heard of tests called sigmoidoscopy or colonoscopy ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4976	3914	76%	75-78%		4992	4565	91%	90-92%	
Area of Residence					^					^
Urban	3219	2517	76%	74-78%		3225	2944	91%	89-92%	
Rural	1757	1397	76%	74-79%		1767	1621	91%	89-92%	
Gender					**					**
Male	1735	1277	71%	69-74%		1740	1563	89%	87-90%	
Female	3241	2637	80%	78-82%		3252	3002	92%	91-93%	
Age					**					**
40-49 years	1438	972	66%	63-69%		1447	1268	87%	85-89%	
50-64 years	1974	1675	83%	81-85%		1973	1847	93%	91-94%	
65 years and older	1564	1267	81%	78-83%		1572	1450	92%	91-94%	
Race					**					**
White	3757	3022	78%	76-80%		3775	3543	94%	93-95%	
African American	1040	776	74%	71-77%		1039	884	84%	81-87%	
Other	179	116	58%	48-67%		178	138	77%	69-83%	
Gender and Race					**					**
White male	1352	1009	72%	69-75%		1358	1252	92%	91-94%	
African American male	314	225	72%	66-77%		314	259	82%	77-86%	
Other male	69	43	56%	41-71%		68	52	77%	63-87%	
White female	2405	2013	83%	81-85%		2417	2291	95%	94-96%	
African American female	726	551	76%	72-79%		725	625	86%	83-89%	
Other female	110	73	59%	48-70%		110	86	77%	66-85%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 4-1 RESPONSES TO QUESTIONS ABOUT AWARENESS OF TESTS FOR COLORECTAL CANCER SCREENING, AMONG THOSE AGE 40 YEARS AND OLDER

	Heard of the home kit to test for blood in the stool ~					Heard of tests called sigmoidoscopy or colonoscopy ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Marital Status					**					**
Married or partner of unmarried couple	2910	2334	78%	76-79%		2922	2748	93%	92-94%	
Divorced or separated	821	627	73%	69-76%		820	725	87%	84-90%	
Widowed	776	613	78%	74-81%		779	696	87%	84-90%	
Never married	452	328	69%	63-74%		454	380	81%	76-86%	
Education					**					**
Less than high school	441	291	63%	57-68%		435	337	75%	69-80%	
High school grad or GED	1444	1098	74%	71-76%		1455	1309	89%	86-90%	
College 1-3 years	1111	894	79%	76-82%		1116	1040	93%	90-94%	
College grad	1115	907	77%	74-80%		1116	1058	95%	93-96%	
Advanced degree	837	706	81%	78-84%		842	798	94%	92-96%	
Employment Status					**					**
Employed for wages	2102	1623	75%	72-77%		2108	1932	91%	89-92%	
Self-employed	412	295	68%	62-74%		414	378	91%	88-94%	
Retired	1714	1432	83%	80-85%		1723	1605	93%	91-94%	
Other	724	551	74%	69-77%		724	630	86%	82-89%	
Household Income					**					**
<$25,000	873	642	69%	64-73%		870	739	82%	78-85%	
$25,000-<$35,000	441	346	76%	71-81%		443	406	90%	86-93%	
$35,000-<$50,000	630	486	73%	68-77%		636	582	90%	87-93%	
$50,000-<$75,000	770	634	80%	76-83%		774	717	92%	89-94%	
$75,000 or greater	1420	1158	78%	75-81%		1424	1354	94%	93-96%	
Don't know/not sure	276	198	74%	67-79%		278	237	85%	79-89%	
Refused	541	433	80%	76-84%		542	508	94%	91-96%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 4-2 RESPONSES TO QUESTIONS ON AWARENESS OF MEDIA PROMOTION OF CRC SCREENING AND NO COST SCREENING PROGRAMS, AMONG THOSE 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**
Total Population	4909	4243	86%	84-87%		4953	1280	24%	23-26%	
Area of Residence					^					**
Urban	3170	2733	85%	84-87%		3206	776	23%	22-25%	
Rural	1739	1510	87%	85-89%		1747	504	28%	25-30%	
Gender					**					**
Male	1704	1418	82%	80-85%		1732	379	20%	18-23%	
Female	3205	2825	88%	87-89%		3221	901	28%	26-29%	
Age					*					**
40-49 years	1434	1225	84%	82-87%		1439	283	19%	17-22%	
50-64 years	1939	1722	88%	86-90%		1967	534	26%	24-29%	
65 years and older	1536	1296	83%	81-86%		1547	463	29%	26-32%	
Race					^					**
White	3705	3221	86%	84-87%		3739	953	24%	22-25%	
African American	1030	879	85%	82-88%		1041	291	27%	24-31%	
Other	174	143	82%	74-88%		173	36	15%	10-23%	
Gender and Race					**					**
White male	1327	1101	82%	79-84%		1349	292	20%	18-22%	
African American male	309	259	84%	79-88%		316	73	23%	18-29%	
Other male	68	58	87%	74-94%		67	14	19%	10-33%	
White female	2378	2120	90%	88-91%		2390	661	27%	25-29%	
African American female	721	620	86%	82-88%		725	218	31%	27-35%	
Other female	106	85	78%	67-86%		106	22	13%	8-21%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 4-2 RESPONSES TO QUESTIONS ON AWARENESS OF MEDIA PROMOTION OF CRC SCREENING AND NO COST SCREENING PROGRAMS, AMONG THOSE 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**
Marital Status					^					^
Married or partner of unmarried couple	2878	2512	86%	85-88%		2894	734	24%	22-25%	
Divorced or separated	809	699	85%	82-88%		821	197	23%	20-27%	
Widowed	758	633	84%	80-87%		771	228	29%	26-33%	
Never married	448	384	83%	78-87%		450	114	25%	20-31%	
Education					^					**
Less than high school	430	360	84%	80-88%		433	137	31%	26-36%	
High school grad or GED	1439	1235	85%	83-87%		1445	407	28%	25-31%	
College 1-3 years	1097	962	87%	84-89%		1106	331	28%	25-31%	
College grad	1095	967	88%	85-90%		1112	233	20%	17-22%	
Advanced degree	820	697	83%	79-86%		830	164	18%	15-21%	
Employment Status					**					**
Employed for wages	2080	1826	86%	84-88%		2096	504	23%	21-25%	
Self-employed	408	358	91%	87-93%		412	83	18%	14-23%	
Retired	1686	1436	84%	82-86%		1704	509	29%	27-32%	
Other	711	604	84%	80-87%		718	176	23%	20-27%	
Household Income					^					**
<$25,000	857	720	83%	80-86%		869	259	28%	25-32%	
$25,000-<$35,000	439	386	88%	84-91%		437	138	32%	27-37%	
$35,000-<$50,000	621	545	87%	83-90%		630	178	28%	24-32%	
$50,000-<$75,000	762	658	84%	80-87%		774	190	23%	20-27%	
$75,000 or greater	1404	1239	88%	85-90%		1413	291	19%	17-21%	
Don't know/not sure	272	221	81%	75-86%		272	79	28%	22-35%	
Refused	529	454	85%	80-88%		533	139	25%	21-30%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 4-3 PEOPLE REPORTING TO HAVE EVER PERFORMED A HOME FOBT, AMONG THOSE 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**
Total Population	3533	1944	54%	52-56%		2256	1281	55%	53-58%		1277	663	51%	48-54%	
Gender					**					**					^
Male	1222	637	51%	48-54%		779	416	51%	47-55%		443	221	50%	45-55%	
Female	2311	1307	57%	55-60%		1477	865	58%	56-61%		834	442	52%	49-56%	
Age					**					**					**
50-64 years	1973	1033	51%	49-54%		1265	681	52%	49-55%		708	352	48%	43-52%	
65 years and older	1560	911	59%	56-62%		991	600	60%	56-63%		569	311	56%	52-61%	
Race					**					**					^
White	2751	1548	57%	55-59%		1604	948	59%	56-61%		1147	600	51%	48-55%	
African American	674	350	50%	45-54%		569	300	50%	45-54%		105	50	52%	41-63%	
Other	108	46	35%	25-47%		83	33	34%	24-47%		25	13	45%	25-67%	
Gender and Race					**					**					^
White male	981	526	53%	49-57%		580	323	54%	50-58%		401	203	50%	45-56%	
African American male	201	93	45%	38-53%		169	79	45%	36-53%		32	14	50%	32-68%	
Other male	40	18	40%	22-60%		30	14	40%	21-61%		10	4	35%	10-72%	
White female	1770	1022	60%	57-62%		1024	625	63%	59-66%		746	397	52%	48-56%	
African American female	473	257	53%	48-58%		400	221	53%	48-59%		73	36	54%	41-66%	
Other female	68	28	31%	20-45%		53	19	30%	18-44%		15	9	53%	27-78%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 4-3 PEOPLE REPORTING TO HAVE EVER PERFORMED A HOME FOBT, AMONG THOSE 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**
Marital Status					**					**					^
Married or partner of unmarried couple	1991	1136	56%	53-58%		1214	717	57%	54-60%		777	419	54%	50-57%	
Divorced or separated	537	279	50%	45-55%		370	194	51%	45-56%		167	85	46%	37-55%	
Widowed	748	411	56%	52-60%		475	280	58%	53-63%		273	131	47%	41-54%	
Never married	243	115	46%	38-53%		187	87	45%	37-54%		56	28	49%	34-65%	
Education					**					**					**
Less than high school	363	155	41%	35-47%		202	97	44%	36-51%		161	58	33%	26-41%	
High school grad or GED	1056	565	54%	50-57%		582	311	54%	49-58%		474	254	54%	49-59%	
College 1-3 years	778	415	52%	48-57%		496	274	53%	48-58%		282	141	50%	44-57%	
College grad	709	423	58%	54-62%		501	304	59%	54-63%		208	119	56%	48-63%	
Advanced degree	603	374	60%	56-65%		457	285	61%	55-66%		146	89	59%	49-67%	
Employment Status					**					**					**
Employed for wages	1145	573	50%	46-53%		769	397	51%	47-55%		376	176	45%	39-51%	
Self-employed	248	125	50%	42-57%		156	88	53%	44-62%		92	37	37%	27-48%	
Retired	1696	1034	61%	58-64%		1051	661	61%	58-65%		645	373	59%	55-63%	
Other	424	205	46%	41-52%		266	128	45%	39-52%		158	77	49%	40-57%	
Household Income					^					^					^
<$25,000	678	338	50%	45-54%		382	201	51%	45-57%		296	137	46%	40-52%	
$25,000-<$35,000	354	204	57%	51-63%		220	125	56%	48-63%		134	79	60%	50-69%	
$35,000-<$50,000	455	240	50%	45-56%		265	138	50%	43-56%		190	102	52%	45-60%	
$50,000-<$75,000	503	281	57%	52-62%		335	199	59%	53-65%		168	82	49%	40-57%	
$75,000 or greater	853	484	55%	51-59%		605	355	55%	51-60%		248	129	51%	44-58%	
Don't know/not sure	224	115	54%	46-62%		144	74	54%	45-63%		80	41	53%	41-65%	
Refused	444	271	59%	53-64%		293	181	59%	53-65%		151	90	55%	46-64%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 4-4 PEOPLE REPORTING TO HAVE PERFORMED A HOME FOBT WITHIN PAST 2 YEARS, AMONG THOSE 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**
Total Population	3533	1288	36%	34-38%		2256	840	36%	34-39%		1277	448	35%	32-38%	
Gender					^					^					^
Male	1222	433	35%	32-38%		779	281	35%	31-39%		443	152	35%	30-40%	
Female	2311	855	37%	35-40%		1477	559	38%	35-41%		834	296	36%	32-39%	
Age					**					**					^
50-64 years	1973	658	33%	30-35%		1265	416	32%	30-35%		708	242	34%	30-38%	
65 years and older	1560	630	41%	39-44%		991	424	42%	39-46%		569	206	38%	33-42%	
Race					^					^					^
White	2751	1002	36%	34-38%		1604	593	37%	34-39%		1147	409	36%	33-39%	
African American	674	253	37%	33-42%		569	221	37%	33-42%		105	32	35%	25-47%	
Other	108	33	28%	19-40%		83	26	29%	19-41%		25	7	21%	9-41%	
Gender and Race					^					^					^
White male	981	349	35%	32-38%		580	210	35%	31-39%		401	139	35%	30-40%	
African American male	201	71	35%	28-43%		169	60	35%	27-43%		32	11	38%	22-58%	
Other male	40	13	34%	18-54%		30	11	35%	18-57%		10	2	13%	3-44%	
White female	1770	653	38%	35-40%		1024	383	38%	35-41%		746	270	36%	32-40%	
African American female	473	182	39%	34-44%		400	161	39%	34-45%		73	21	33%	22-46%	
Other female	68	20	24%	14-36%		53	15	23%	14-37%		15	5	27%	11-54%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 4-4 PEOPLE REPORTING TO HAVE PERFORMED A HOME FOBT WITHIN PAST 2 YEARS, AMONG THOSE 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**
Marital Status					^					^					^
Married or partner of unmarried couple	1991	751	37%	35-40%		1214	456	37%	34-40%		777	295	38%	34-41%	
Divorced or separated	537	181	33%	28-37%		370	127	33%	28-39%		167	54	31%	24-40%	
Widowed	748	280	38%	35-43%		475	199	41%	36-46%		273	81	29%	23-35%	
Never married	243	74	31%	24-38%		187	56	30%	23-38%		56	18	37%	24-52%	
Education					**					^					**
Less than high school	363	100	28%	23-34%		202	68	31%	25-38%		161	32	19%	13-26%	
High school grad or GED	1056	386	37%	33-40%		582	215	37%	33-42%		474	171	36%	31-41%	
College 1-3 years	778	278	35%	32-40%		496	178	35%	30-40%		282	100	37%	31-44%	
College grad	709	278	38%	34-42%		501	196	37%	33-42%		208	82	40%	33-48%	
Advanced degree	603	235	38%	34-43%		457	174	38%	33-43%		146	61	42%	34-51%	
Employment Status					**					**					^
Employed for wages	1145	376	32%	29-35%		769	244	32%	28-36%		376	132	34%	29-39%	
Self-employed	248	84	35%	28-42%		156	59	37%	29-46%		92	25	26%	17-37%	
Retired	1696	692	42%	39-45%		1051	456	43%	40-46%		645	236	39%	35-43%	
Other	424	130	28%	23-33%		266	75	26%	21-33%		158	55	34%	27-43%	
Household Income					^					^					^
<$25,000	678	234	35%	31-40%		382	141	36%	31-42%		296	93	32%	26-38%	
$25,000-<$35,000	354	138	41%	35-47%		220	92	42%	35-50%		134	46	37%	28-47%	
$35,000-<$50,000	455	164	36%	31-41%		265	91	34%	28-41%		190	73	39%	32-47%	
$50,000-<$75,000	503	183	37%	32-42%		335	125	37%	31-43%		168	58	35%	28-43%	
$75,000 or greater	853	307	35%	32-39%		605	222	36%	31-40%		248	85	34%	28-41%	
Don't know/not sure	224	80	35%	28-43%		144	48	33%	25-43%		80	32	42%	30-54%	
Refused	444	173	36%	31-41%		293	114	36%	30-42%		151	59	35%	27-43%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 4-5 PEOPLE REPORTING TO HAVE EVER HAD A SIGMOIDOSCOPY OR COLONOSCOPY, AMONG THOSE 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**
Total Population	3507	2219	63%	61-65%		2237	1440	64%	61-66%		1270	779	61%	58-64%	
Gender					**					**					^
Male	1208	807	65%	62-69%		773	535	67%	63-70%		435	272	61%	56-66%	
Female	2299	1412	61%	59-64%		1464	905	61%	59-64%		835	507	61%	57-64%	
Age					**					**					**
50-64 years	1965	1162	59%	56-61%		1257	750	59%	56-62%		708	412	57%	52-61%	
65 years and older	1542	1057	70%	67-72%		980	690	71%	67-74%		562	367	67%	62-71%	
Race					**					**					^
White	2744	1782	66%	64-68%		1600	1075	67%	64-70%		1144	707	62%	58-65%	
African American	658	383	58%	53-62%		556	324	58%	53-62%		102	59	55%	44-66%	
Other	105	54	47%	35-60%		81	41	47%	34-60%		24	13	53%	30-75%	
Gender and Race					**					**					^
White male	974	662	68%	64-71%		578	412	70%	66-74%		396	250	62%	56-67%	
African American male	195	123	60%	52-67%		165	106	60%	51-68%		30	17	55%	36-73%	
Other male	39	22	47%	27-68%		30	17	47%	26-69%		9	5	53%	17-86%	
White female	1770	1120	64%	61-66%		1022	663	65%	61-68%		748	457	61%	57-65%	
African American female	463	260	56%	51-61%		391	218	56%	50-62%		72	42	56%	43-68%	
Other female	66	32	47%	33-62%		51	24	47%	32-62%		15	8	53%	27-77%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 4-5 PEOPLE REPORTING TO HAVE EVER HAD A SIGMOIDOSCOPY OR COLONOSCOPY, AMONG THOSE 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**
Marital Status					**					**					**
Married or partner of unmarried couple	1984	1314	66%	63-68%		1208	819	67%	64-70%		776	495	63%	59-67%	
Divorced or separated	536	320	59%	54-64%		369	225	60%	54-65%		167	95	56%	46-64%	
Widowed	733	459	61%	57-65%		466	296	61%	56-66%		267	163	61%	55-68%	
Never married	241	120	48%	41-56%		185	95	50%	41-58%		56	25	38%	25-52%	
Education					**					**					**
Less than high school	350	162	45%	39-51%		194	92	45%	38-53%		156	70	44%	36-53%	
High school grad or GED	1047	624	59%	56-63%		573	337	58%	54-63%		474	287	61%	56-66%	
College 1-3 years	776	496	61%	57-66%		494	310	61%	56-66%		282	186	62%	55-68%	
College grad	709	487	69%	65-73%		501	352	70%	66-75%		208	135	65%	57-72%	
Advanced degree	602	440	75%	70-78%		458	340	75%	70-79%		144	100	73%	65-80%	
Employment Status					**					**					**
Employed for wages	1143	666	58%	55-62%		768	466	60%	56-64%		375	200	52%	47-58%	
Self-employed	247	144	57%	50-64%		155	94	59%	50-68%		92	50	50%	39-62%	
Retired	1676	1169	71%	69-74%		1037	740	72%	69-75%		639	429	69%	65-73%	
Other	423	230	51%	45-57%		265	133	49%	42-56%		158	97	59%	50-67%	
Household Income					**					**					**
<$25,000	671	351	49%	45-54%		377	197	49%	43-54%		294	154	51%	45-57%	
$25,000-<$35,000	352	239	66%	60-72%		219	145	66%	58-72%		133	94	68%	58-77%	
$35,000-<$50,000	452	293	62%	57-67%		262	166	61%	54-68%		190	127	64%	56-71%	
$50,000-<$75,000	497	316	66%	61-70%		333	214	66%	60-72%		164	102	63%	55-71%	
$75,000 or greater	853	574	67%	63-71%		605	417	68%	63-72%		248	157	63%	56-70%	
Don't know/not sure	219	126	59%	51-67%		137	83	61%	51-70%		82	43	54%	42-66%	
Refused	441	311	70%	64-74%		292	211	71%	65-76%		149	100	64%	55-73%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

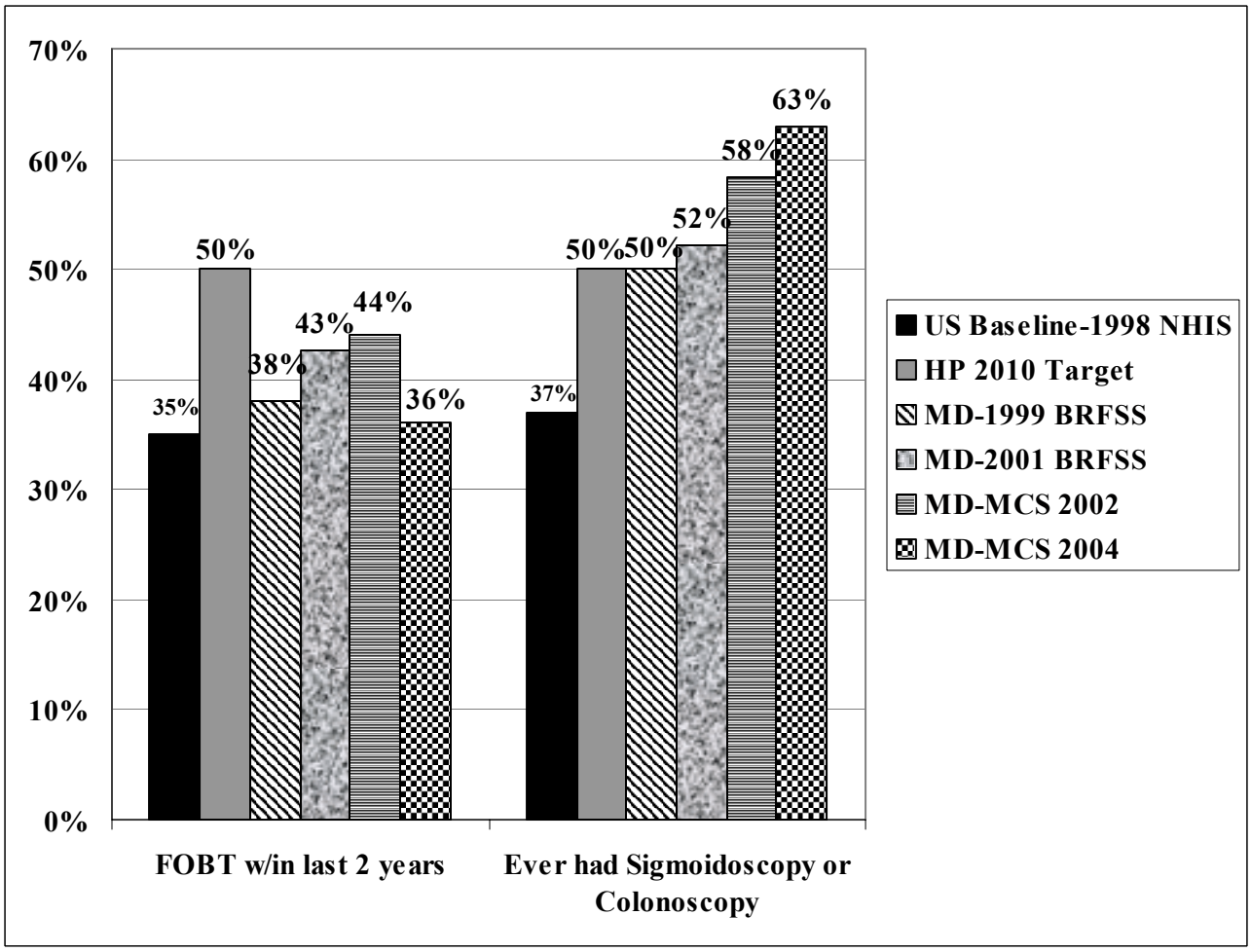
TABLE 4-6 RESPONSES TO THE QUESTION "WHAT WAS THE MOST IMPORTANT REASON YOU HAVE NEVER HAD AN FOBT OR A SIGMOIDSCOPY OR COLONOSCOPY, AMONG THOSE AGE 50 YEARS AND OLDER?"*

Selected Response	wt %
Doctor didn't order it/didn't say I needed it	27%
No reason, never thought about it	22%
Didn't need/ didn't know I needed this type of test	17%
Haven't had any problems	14%
Put it off/didn't get around to it	9%
Too expensive/no insurance/cost of test	4%
Too painful, unpleasant, or embarrassing	4%
Don't have a doctor	2%
No family history of CRC/at low risk	1%
Don’t know/not sure of the reason	5%

*Question asked of 738 participants age 50 years or older who reported they have never had an FOBT, sigmoidoscopy or colonoscopy, More than one response could be given per respondent.

Maryland Cancer Survey, 2004

Chart 4-2 Proportion of people age 50 years and older who have had a fecal occult blood test (FOBT) in the previous two years and have ever had a sigmoidoscopy or colonoscopy; comparison of the results of the Maryland Cancer Survey, 2004 to national baselines, Healthy People 2010 target values, and previous Maryland surveys.



NHIS-National Health Interview Survey
HP 2010 Target-Healthy People 2010 Target
BRFSS-Behavioral Risk Factor Surveillance System Survey
MD-MCS 2002-Maryland Cancer Survey, 2002
MD-MCS 2004-Maryland Cancer Survey, 2004

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 3,843 cases in 2001.[1] It is the third leading cause of statewide cancer deaths among men, after lung cancer and colorectal cancer. Maryland had the 10th highest mortality rate for prostate cancer among the 50 states and the District of Columbia between 1997-2001.

Serum prostate-specific antigen (PSA) and the digital rectal exam (DRE) are the two tests most commonly used to screen for prostate cancer. Whether or not 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 for men at higher risk (e.g., African Americans and men who have a first-degree relative with prostate cancer).[2] The ACS recommends that men with more than one first-degree relative with prostate cancer could begin testing at age 40.[2,3] 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.[4] 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.

In the MCS 2004, when asked whether a doctor or other health care provider had ever discussed prostate cancer screening with them, 58% of men 40 years and older answered yes (Table 5-1). This proportion was higher among men 50-64 years of age (67%) and those above 65 years (73%) compared to younger men age 40-49 years (41%). There were also statistically significant differences by race, marital status, education, employment status, and household income. Men of other races (39%) were less likely to report having this discussion with their health care provider, compared to whites (60%) and African Americans (58%). Those men who never married, had less education, or had "other" employment status were also less likely to have discussed screening with a healthcare provider. While there were differences by income, no trend was observed.

The following analysis of prostate cancer screening tests (PSA and DRE) includes men of all race categories 50 years and older and African American men ages 45-49 years (the ages recommended by the ACS to begin offering screening). Table 5-2 shows that 77% of men in these age and race groups reported ever having had the PSA test. The percentage of men who ever had a PSA test did not vary significantly by urban vs. rural area of residence. Among African American men between the ages of 45 and 49, 61% reported ever having been tested. The prevalence of ever having a PSA test among men in the 50-64 year age group was lower

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[1] Annual Cancer Report, Cigarette Restitution Fund Program, Maryland Department of Health and Mental Hygiene, September 2004 http://www.fha.state.md.us/cancer/html/crf_ann_can_rpt.html

[2] American Cancer Society Cancer Detection Guidelines http://www.cancer.org/docroot/PED/content/PED_2_3X_ACS_Cancer_Detection_Guidelines_36.asp?sitearea=PED and DHMH Prostate Cancer Medical Advisory Committee, Minimal Elements 2002

[3] American Cancer Society, Detailed guide –prostate cancer, Can prostate cancer be found early? http://www.cancer.org/docroot/CRI/content/CRI_2_4_3X_Can_prostate_cancer_be_found_early_36.asp

[4] Screening-Prostate USPSTF Update, 2002 release-http://www.ahcpr.gov/clinic/uspstf/uspsprca.htm

than for men 65 years and older in both rural and urban areas. African American men had lower prevalence of PSA testing than whites in both urban (73% vs. 79%) and rural areas (70% vs. 80%) but these differences were not statistically significant. (The number of men of other races in these age groups was small, and their estimate of PSA testing may be unstable.) There were no significant differences in PSA screening by marital status. Men who were retired were more likely to report having ever been tested with PSA than men in other employment categories. Those who received less than a high school education or had an annual household income of less than $25,000 were less likely to have ever had a PSA test as compared to other groups in their respective categories. Among **all** men below age 50 years, 22% of those 40-44 years had ever been screened, compared to 48% of those 45-49 years (data not shown in tables).

Of the men in the age/race groups recommended to be offered screening by the ACS guidelines (men of all race categories 50 years and older and African American men ages 45-49 years), 60% have been screened with PSA within the last year (Table 5-3). The proportion of men screened in the last year increased with increasing age, and the difference was statistically significant among both urban and rural populations. White men had higher testing rates in the last year than did African Americans. The percentage of men reporting PSA testing in the last year generally increased with increasing education levels. Men with a household income of less than $25,000 annually had the lowest percentage of PSA testing in the past year.

Of the 23% (of men over age 50 years and African Americans age 45-49 years) who reported they have never been screened with the PSA test, 30% reported the doctor did not order it or say it was needed, 27% gave no reason or said they never thought about it, 13% reported they haven't had any problems, and 11% said they didn't need the test or didn't know they needed the test (Table 5-4). Infrequent reasons included the high cost of the test and not having a doctor.

Almost 14% of all men, age 40 years and older, reported a family history of prostate cancer in a first-degree relative. Of men age 40 years and older with a family history, 75% had ever had a PSA. When a family history of prostate cancer was present among men 50 years and older, 91% reported they had ever had a PSA test, compared to 77% of men without a family history. Forty-nine percent (49%) of men with a family history of prostate cancer, between 40-49 years of age, have ever had a PSA test, compared to 30% without a family history (data not shown in tables.)

Among Maryland men meeting the ACS recommended ages for prostate screening, 86% reported having ever had a DRE (Table 5-5). As with PSA testing, men age 65 years and older were more likely to have ever had a DRE than those 50-64 years (91% vs. 84%, respectively.) African Americans have lower DRE screening prevalence than whites. A lower prevalence of ever having a DRE was also reported among men who were never married or had an education level less than high school. In urban areas men with an employment status of "other" reported lower prevalence of DRE testing, whereas in rural areas, men who were self-employed had the lowest prevalence of DRE screening. Men who reported an annual household income less than $25,000 also reported lower prevalence of ever having a DRE.

Fifty-eight percent (58%) of men reported to have had a DRE in the past year, with no statistically significant difference by area of residence or race. The lowest prevalence was observed among men with an education less than high school compared to other categories of education or among men with an annual household income less than $25,000 (Table 5-6). Of the men in the age and race groups recommended to be offered prostate cancer screening, only, 47% reported they had received both a PSA and DRE in the past year (data not shown in tables).

In the analysis of prostate screening tests in the MCS 2002 report, we included all men 50 years and older, but did not include African American men between 45-49 years. After reanalysis using the same age/race criteria as in this report, the MCS 2002 showed 73% of men have ever had the PSA test as compared to 77% in the MCS 2004. The percentage of men who had ever had a DRE in the 2002 survey was 88%, compared to 86% in 2004. The percent of men with PSA *and* DRE in the past year was 47% in MCS 2002 and, unchanged at 47% in MCS 2004 (Table 12-1).

TABLE 5-1 REPORTED DISCUSSION OF PROSTATE CANCER SCREENING BY A HEALTHCARE PROVIDER, AMONG MEN AGE 40 YEARS AND OLDER

	Has had a health care provider discussed prostate cancer screening ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Male Population	1727	1063	58%	55-61%	
Area of Residence					^
Urban	1100	688	59%	55-62%	
Rural	627	375	57%	52-61%	
Age					**
40-49 years	506	201	41%	36-46%	
50-64 years	688	471	67%	63-71%	
65 years and older	533	391	73%	68-77%	
Race					**
White	1344	839	60%	56-63%	
African American	315	190	58%	51-64%	
Other	68	34	39%	26-54%	
Marital Status					**
Married or partner of unmarried couple	1161	728	60%	56-63%	
Divorced or separated	243	151	59%	52-66%	
Widowed	137	91	64%	54-73%	
Never married	181	91	45%	36-54%	
Education					**
Less than high school	142	71	47%	37-57%	
High school grad or GED	452	234	46%	41-52%	
College 1-3 years	353	214	56%	49-62%	
College grad	415	274	63%	57-68%	
Advanced degree	353	262	74%	68-79%	
Employment Status					**
Employed for wages	795	449	54%	50-58%	
Self-employed	193	104	51%	43-60%	
Retired	607	440	73%	69-77%	
Other	121	61	46%	36-57%	
Household Income					**
<$25,000	222	112	42%	34-50%	
$25,000-<$35,000	131	81	61%	51-70%	
$35,000-<$50,000	239	132	47%	40-55%	
$50,000-<$75,000	312	202	63%	57-69%	
$75,000 or greater	601	396	63%	59-68%	
Don't know/not sure	46	31	73%	57-85%	
Refused	169	104	56%	46-65%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

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

	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**
Male Population	1213	954	77%	74-80%		782	614	77%	73-80%		431	340	78%	73-82%	
Age					**					**					**
45-49 (AA only)	50	31	61%	45-75%		42	27	64%	46-78%		8	4	43%	15-77%	
50-64 years	646	475	73%	69-77%		401	292	73%	68-77%		245	183	74%	67-80%	
65 years and older	517	448	87%	83-90%		339	295	87%	82-90%		178	153	88%	82-92%	
Race					^					^					^
White	935	748	79%	76-82%		550	440	79%	75-83%		385	308	80%	75-84%	
African American	238	177	73%	66-79%		202	152	73%	66-80%		36	25	70%	51-84%	
Other	40	29	71%	50-86%		30	22	72%	49-87%		10	7	59%	20-89%	
Marital Status					^					^					^
Married or partner of unmarried couple	818	656	79%	75-82%		509	406	79%	74-82%		309	250	80%	74-84%	
Divorced or separated	165	131	74%	65-82%		110	90	76%	65-85%		55	41	67%	49-81%	
Widowed	123	95	77%	67-84%		82	65	77%	65-86%		41	30	74%	58-86%	
Never married	105	71	66%	55-76%		80	53	65%	52-76%		25	18	77%	55-90%	
Education					**					**					^
Less than high school	112	71	60%	48-71%		64	39	58%	44-71%		48	32	66%	49-80%	
High school grad or GED	308	232	75%	69-80%		160	119	74%	66-81%		148	113	77%	68-84%	
College 1-3 years	251	186	74%	67-80%		150	110	74%	65-81%		101	76	73%	62-82%	
College grad	272	225	79%	72-84%		190	152	77%	69-84%		82	73	86%	73-93%	
Advanced degree	259	232	89%	84-93%		210	189	89%	83-93%		49	43	89%	76-95%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

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

	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**
Employment Status					**					**					**
Employed for wages	421	310	73%	68-78%		284	211	73%	67-79%		137	99	72%	63-80%	
Self-employed	131	92	72%	62-80%		80	59	76%	64-84%		51	33	60%	44-74%	
Retired	581	495	84%	80-87%		367	311	83%	78-87%		214	184	86%	80-91%	
Other	69	48	66%	51-78%		43	27	62%	44-77%		26	21	82%	59-93%	
Household Income					**					**					**
<$25,000	170	106	56%	47-66%		101	61	55%	43-66%		69	45	61%	47-74%	
$25,000-<$35,000	104	84	77%	65-86%		63	54	80%	65-90%		41	30	69%	50-83%	
$35,000-<$50,000	170	134	76%	67-83%		95	71	72%	60-81%		75	63	84%	73-91%	
$50,000-<$75,000	208	166	80%	73-85%		144	117	80%	72-87%		64	49	77%	64-86%	
$75,000 or greater	387	320	82%	77-86%		266	219	82%	76-87%		121	101	81%	71-88%	
Don't know/not sure	28	23	79%	50-94%		19	16	79%	45-94%		9	7	83%	41-97%	
Refused	140	116	84%	76-90%		91	74	82%	72-89%		49	42	90%	78-95%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

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

	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**
Male Population	1213	749	60%	57-63%		782	486	60%	56-64%		431	263	61%	56-66%	
Age					**					**					**
45-49 (AA only)	50	22	41%	27-58%		42	19	43%	27-60%		8	3	30%	9-65%	
50-64 years	646	353	55%	51-60%		401	220	55%	50-60%		245	133	56%	49-62%	
65 years and above	517	374	72%	67-76%		339	247	71%	65-76%		178	127	73%	66-80%	
Race					**					^					^
White	935	591	63%	60-67%		550	352	63%	59-68%		385	239	62%	57-68%	
African American	238	137	54%	47-61%		202	117	54%	46-62%		36	20	57%	39-73%	
Other	40	21	44%	25-65%		30	17	45%	25-67%		10	4	30%	8-67%	
Marital Status					^					^					^
Married or partner of unmarried couple	818	526	62%	58-66%		509	332	62%	57-67%		309	194	62%	56-68%	
Divorced or separated	165	95	55%	45-63%		110	67	56%	45-66%		55	28	50%	34-65%	
Widowed	123	68	51%	41-61%		82	44	49%	37-61%		41	24	60%	44-74%	
Never married	105	59	57%	46-68%		80	43	55%	43-67%		25	16	71%	50-86%	
Education					**					**					^
Less than high school	112	55	49%	37-60%		64	31	48%	34-62%		48	24	50%	35-66%	
High school grad or GED	308	176	57%	50-63%		160	91	56%	47-64%		148	85	58%	49-67%	
College 1-3 years	251	143	55%	47-62%		150	83	53%	44-62%		101	60	59%	48-69%	
College grad	272	179	62%	55-69%		190	123	61%	52-69%		82	56	69%	57-79%	
Advanced degree	259	188	71%	64-77%		210	153	71%	63-77%		49	35	69%	54-82%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

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

	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**
Employment Status					**					**					**
Employed for wages	421	225	52%	46-58%		284	157	52%	46-59%		137	68	51%	42-60%	
Self-employed	131	69	53%	43-63%		80	44	56%	44-68%		51	25	43%	29-58%	
Retired	581	413	70%	65-74%		367	259	69%	63-74%		214	154	73%	66-79%	
Other	69	33	53%	38-67%		43	20	52%	35-69%		26	13	56%	35-76%	
Household Income					**					^					^
<$25,000	170	80	44%	35-53%		101	47	43%	32-55%		69	33	46%	33-59%	
$25,000-<$35,000	104	58	54%	43-65%		63	38	55%	41-69%		41	20	51%	34-67%	
$35,000-<$50,000	170	113	64%	55-72%		95	60	61%	50-72%		75	53	70%	57-80%	
$50,000-<$75,000	208	137	66%	58-73%		144	95	66%	57-74%		64	42	65%	51-76%	
$75,000 or greater	387	250	62%	56-68%		266	177	63%	56-69%		121	73	60%	50-70%	
Don't know/not sure	28	21	72%	45-89%		19	15	71%	40-90%		9	6	77%	39-95%	
Refused	140	85	60%	50-69%		91	52	57%	45-67%		49	33	71%	55-82%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 5-4 RESPONSES TO THE QUESTION "WHAT WAS THE MOST IMPORTANT REASON YOU HAVE NEVER HAD A PROSTATE SPECIFIC ANTIGEN TEST?"*

Selected Response	wt %
Doctor didn't order it/didn't say I needed it	30%
No reason, never thought about it	27%
Haven't had any problems	13%
Didn't need it, didn't know I needed the test	11%
Put it off / Didn't get around to it	5%
Too expensive/ no insurance /cost of test	4%
Don't have a doctor	3%
Felt to be too young/ too old for the test	2%
Don't know/ not sure of the reason	6%

*Question asked of 259 men who were either age 50 years or older or 45-49 year old African Americans, and reported they had never had a PSA. More than one response could be given per respondent.

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

	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**
Male Population	1276	1109	86%	83-88%		824	710	85%	82-88%		452	399	88%	84-91%	
Age					**					**					^
45-49 (AA only)	51	37	75%	60-86%		43	30	75%	58-86%		8	7	80%	32-97%	
50-64 years	690	584	84%	81-87%		429	360	84%	79-87%		261	224	86%	80-90%	
65 years and above	535	488	91%	88-93%		352	320	90%	86-93%		183	168	92%	87-96%	
Race					**					^					^
White	986	874	88%	85-90%		583	516	88%	84-90%		403	358	89%	85-92%	
African American	252	206	81%	75-86%		212	172	81%	74-86%		40	34	84%	66-93%	
Other	38	29	77%	54-90%		29	22	76%	53-90%		9	7	87%	54-97%	
Marital Status					**					^					**
Married or partner of unmarried couple	860	763	87%	85-90%		535	467	86%	83-89%		325	296	91%	87-94%	
Divorced or separated	176	149	82%	74-88%		120	102	84%	75-90%		56	47	74%	54-87%	
Widowed	129	113	85%	76-91%		86	78	87%	75-94%		43	35	80%	64-90%	
Never married	108	82	77%	66-85%		82	63	76%	64-85%		26	19	81%	64-92%	
Education					**					**					**
Less than high school	114	89	75%	63-83%		65	50	74%	60-84%		49	39	77%	61-88%	
High school grad or GED	325	263	80%	74-85%		172	136	79%	71-85%		153	127	83%	75-89%	
College 1-3 years	268	237	87%	81-91%		161	138	85%	78-91%		107	99	92%	83-97%	
College grad	286	260	89%	84-93%		198	177	88%	81-93%		88	83	95%	88-98%	
Advanced degree	271	252	92%	88-95%		220	204	92%	87-96%		51	48	93%	80-98%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

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

	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**
Employment Status					**					**					**
Employed for wages	453	383	84%	79-87%		306	256	83%	77-87%		147	127	86%	78-92%	
Self-employed	134	110	83%	74-89%		82	70	85%	74-92%		52	40	76%	60-87%	
Retired	604	552	91%	88-93%		380	342	90%	86-93%		224	210	93%	89-96%	
Other	74	56	75%	61-85%		48	36	73%	57-85%		26	20	82%	61-93%	
Household Income					**					**					^
<$25,000	175	133	71%	62-79%		103	74	68%	57-78%		72	59	80%	66-90%	
$25,000-<$35,000	110	102	92%	83-96%		68	63	92%	80-97%		42	39	92%	69-98%	
$35,000-<$50,000	177	153	84%	75-90%		97	83	82%	71-90%		80	70	87%	77-93%	
$50,000-<$75,000	221	198	90%	84-93%		154	135	89%	82-93%		67	63	94%	85-98%	
$75,000 or greater	407	366	89%	85-92%		281	251	89%	84-92%		126	115	91%	83-95%	
Don't know/not sure	34	26	71%	49-87%		24	18	69%	44-87%		10	8	81%	46-96%	
Refused	145	127	88%	81-93%		94	84	89%	81-95%		51	43	85%	72-93%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 5-6 MEN REPORTING TO HAVE HAD A DIGITAL RECTAL EXAM (DRE) IN THE PAST YEAR, AMONG MEN OF ALL RACES 50 YEARS AND OLDER AND AFRICAN AMERICAN MEN 45-49 YEARS

	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**
Male Population	1276	761	58%	55-62%		824	483	57%	54-61%		452	278	62%	56-66%	
Age					**					**					^
45-49 (AA only)	51	25	52%	37-67%		43	20	53%	36-69%		8	5	47%	17-79%	
50-64 years	690	384	55%	50-59%		429	232	54%	48-59%		261	152	58%	52-65%	
65 years and above	535	352	66%	61-70%		352	231	65%	60-71%		183	121	68%	60-75%	
Race					^					^					^
White	986	601	60%	56-63%		583	351	59%	55-63%		403	250	62%	57-67%	
African American	252	140	56%	49-63%		212	115	55%	47-63%		40	25	62%	44-77%	
Other	38	20	50%	29-71%		29	17	51%	28-73%		9	3	29%	7-67%	
Marital Status					**					**					^
Married or partner of unmarried couple	860	531	60%	57-64%		535	332	60%	56-65%		325	199	61%	55-66%	
Divorced or separated	176	102	55%	46-63%		120	67	54%	44-64%		56	35	56%	40-71%	
Widowed	129	76	55%	45-65%		86	51	53%	41-65%		43	25	61%	45-75%	
Never married	108	50	46%	36-57%		82	33	41%	30-54%		26	17	76%	58-88%	
Education					**					^					**
Less than high school	114	52	45%	34-57%		65	31	47%	33-61%		49	21	41%	27-56%	
High school grad or GED	325	180	55%	49-62%		172	92	54%	46-62%		153	88	58%	50-67%	
College 1-3 years	268	166	58%	50-65%		161	92	53%	44-62%		107	74	71%	61-79%	
College grad	286	185	64%	57-70%		198	126	64%	56-71%		88	59	65%	53-75%	
Advanced degree	271	172	62%	56-69%		220	138	62%	55-69%		51	34	65%	50-78%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 5-6 MEN REPORTING TO HAVE HAD A DIGITAL RECTAL EXAM (DRE) IN THE PAST YEAR, AMONG MEN OF ALL RACES 50 YEARS AND OLDER AND AFRICAN AMERICAN MEN 45-49 YEARS

	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**
Employment Status					**					**					**
Employed for wages	453	248	53%	48-59%		306	167	53%	47-59%		147	81	54%	45-63%	
Self-employed	134	74	57%	47-66%		82	50	61%	49-72%		52	24	44%	30-59%	
Retired	604	397	65%	61-69%		380	241	64%	58-69%		224	156	70%	64-77%	
Other	74	35	47%	34-62%		48	20	44%	29-61%		26	15	61%	39-79%	
Household Income					**					^					^
<$25,000	175	83	44%	35-53%		103	45	42%	31-53%		72	38	51%	38-63%	
$25,000-<$35,000	110	62	60%	49-70%		68	37	58%	44-70%		42	25	66%	49-80%	
$35,000-<$50,000	177	113	59%	50-67%		97	60	56%	44-67%		80	53	64%	52-75%	
$50,000-<$75,000	221	142	65%	57-72%		154	95	64%	55-71%		67	47	71%	58-81%	
$75,000 or greater	407	248	59%	54-65%		281	177	61%	54-67%		126	71	54%	45-64%	
Don't know/not sure	34	19	49%	30-69%		24	13	46%	25-68%		10	6	67%	35-89%	
Refused	145	91	63%	54-71%		94	55	60%	49-70%		51	36	73%	58-84%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

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

Female breast cancer remains the most common reportable cancer among women, representing 15.4% of all new cancers in Maryland in 2001.[1] That year, there were 3,551 new cases of invasive breast cancer diagnosed among Maryland women. Breast cancer accounted for 7.9% of all cancer deaths in Maryland in 2001 with 782 deaths; breast cancer is the second leading cause of cancer death among women after lung cancer.[1] In 2001, 205 women in Maryland were diagnosed with invasive cervical cancer and 82 women died of the disease. Among the 50 states and the District of Columbia for the period 1997-2001, Maryland women ranked 8th highest in breast cancer mortality and 27th highest in cervical cancer mortality.[1]

6.1 Breast cancer screening

Mammography and clinical breast exam (CBE) are the tests recommended to screen for breast cancer. Among Maryland women age 40 years and older who had seen a physician in the last year, 84% reported receiving a recommendation to have a mammogram (Table 6-1). Mammogram recommendations were reported more often among women age 50-64 years (87%) and 65-74 years (89%), compared to the younger (40-49 years, 82%) or older age groups (75 years and older, 78%); these differences were statistically significant. While there were no differences by race, education, or employment status, significant differences were seen by marital status and income. Women who were widowed or women who had an annual household income of less than $35,000 were less likely to report a health care provider recommendation for a mammogram in the last year.

Among Maryland women age 40 years and older, 93% reported ever having had a mammogram (Table 6-2). While there was no difference by area of residence (urban vs. rural) or race, statistically significantly lower percentages were reported by women age 40-49 years, compared to older age groups. There was no significant difference by marital status. As educational level increased, so did prevalence of reported mammograms. This was only seen among urban women. Women who reported their employment status as "other" had statistically significantly lower mammogram percentages, but this difference was seen only in the urban areas. While there were differences in mammogram percentages by annual household income, no specific trends were identified, and the difference was not significant among the urban population.

Maryland women 40 years old and older have already surpassed the Healthy People 2010 objective of 70% for mammography screening in the last 2 years. Eighty-three percent (83%) reported having had a mammogram in the last 2 years (Table 6-3). The prevalence of obtaining a mammogram in the last 2 years was the lowest among the youngest age group of 40-49 years (77%) followed by those 75 years of age and older (81%). There were no significant differences by race or marital status. The overall prevalence of getting a mammogram in the last 2 years was lowest among women who had less than a high school education (75%), women who reported their employment status as self-employed (79%) or "other" (74%), or among those with an annual household income less than $25,000 (75%).

[1] Annual Cancer Report, Cigarette Restitution Fund Program, September, 2004, Maryland Department of Health and Mental Hygiene. http://www.fha.state.md.us/cancer/html/crf_ann_can_rpt.html

Women who have never had a mammogram or have not had the test in the last 2 years were asked the reason; these results are shown in Table 6-4. Procrastination was the most common reason given, with 19% of these women reporting that they "put it off or didn't get around to it." Other reasons included: not having a specific reason or never thinking of getting a mammogram (16%); the doctor did not order it or did not say it was needed (13%); the women reported they didn't need the test or didn't know the test was needed (8%); the test was too expensive or the women did not have insurance (11%); or the women did not have any problems (10%). 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 those who did not have a health care provider recommendation, only 28% reported having a mammogram within the last year (data not shown in tables).

Ninety-six percent (96%) of women 40 years and older reported ever having had a CBE (Table 6-5). The prevalence of ever having a CBE was very high among all the age groups but comparatively lower among the oldest age group, 75 years and older. The prevalence was also lower among women of other race (85%) compared to white and African American groups (96%). Lower rates were seen among women who were widowed or never married, had a high school education or less, or had an annual income less than $25,000 (compared to an annual household income of $50,000 or more). There was no significant difference by employment status.

Maryland women continue to be far ahead of the Healthy People 2010 goals for breast cancer screening (Chart 6-1). There was little change in prevalence of having breast cancer screening from the 2002 MCS. In 1998, the national baseline for having a mammogram in the preceding 2 years among women age 40 years and older was 67%. The Healthy People 2010 goal is 70%.[2] Maryland exceeded that goal in 2004, with 83% of women reporting they have had a mammogram in the last 2 years.

6.2 Cervical cancer screening

Cervical cytology (or the Pap smear) is the screening test that is recommended for the early detection of pre-malignant and malignant changes of the cervix. Among Maryland women age 40 years and older who have an intact cervix and saw a physician in the past year, 77% reported they received a recommendation to have a Pap smear (Table 6-1). While the majority of women in all age groups reported that a health care provider recommended a Pap smear in the last year, women 75 years and older had statistically significantly lower rates (58%) followed by those 65-74 years (70%), compared to women in younger age groups (80% and 82% for women 40-49 years and 50-64 years, respectively). Women who are widowed, retired, or have an annual income of less than $25,000 also reported lower prevalence of provider recommendations for Pap smear.

Among women who have not had a hysterectomy, 98% report ever having had a Pap smear (Table 6-6). While there were statistically significant differences by age, marital status,

[2] Healthy People 2010, US Department of Health and Human Services, 2000. http://www.healthypeople.gov/document/HTML/Volume1/03Cancer.htm

education, employment status, and income, the lowest prevalence in any category and group was 94%, making Pap smear testing the most commonly reported cancer screening test.

Ninety percent (90%) of Maryland women, age 40 years and older, who have not had a hysterectomy, had a Pap smear within the last 3 years (Table 6-7). Those living in urban areas were more likely to report having a Pap smear in the last 3 years (90%) compared to women in rural areas (87%). Women age 75 years and older were least likely to report a recent Pap smear; this was most marked in rural areas (79% in urban and 59% in rural). While there was no difference by race, those who were widowed, had less than a high school education, were retired or had an employment status of "other," or had a household income of less than $25,000 annually were less likely to have had a Pap smear in the last 3 years. Among women who have not had a hysterectomy, the most common reason for never having or not having had a Pap smear in the last 3 years was no specific reason or never thought about it (24%), followed by the women who put it off or didn't get around to it (13%), and those reporting not having any problems (13%) (Table 6-8).

Maryland women continue to be far ahead of the Healthy People 2010 goals for cervical cancer screening (Chart 6-1). There was little change in prevalence of having cervical cancer screening from the 2002 MCS. In 1998, the national baseline for having a Pap smear within the preceding 3 years among women age 18 years and above was 79%. The Healthy People 2010 goal for this same group of women is 90%.[2] In 2004, Maryland women age 40 and above have attained this Healthy People 2010 goal, with 90% of the women reporting to have had a Pap smear within the previous 3 years.

TABLE 6-1 WOMEN REPORTING THAT A HEALTH CARE PROVIDER RECOMMENDED CANCER SCREENING WITH MAMMOGRAM AND PAP SMEAR, AMONG THOSE AGE 40 YEARS AND OLDER

	Women reporting that a health care provider recommended they have a mammogram in the last year~					Women reporting that a health care provider recommended they have a Pap smear in the last year, among women who have not had a hysterectomy ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Female Population	3222	2730	84%	83-86%		2162	1643	77%	75-79%	
Area of Residence					^					^
Urban	2095	1773	84%	82-86%		1450	1115	78%	75-80%	
Rural	1127	957	84%	82-87%		712	528	75%	71-78%	
Age					**					**
40-49 years	930	766	82%	79-84%		754	607	80%	76-83%	
50-64 years	1270	1117	87%	85-90%		859	690	82%	79-84%	
65-74 years	567	492	89%	86-91%		305	213	70%	64-76%	
75 years and above	455	355	78%	73-82%		244	133	58%	51-65%	
Race					^					^
White	2391	2030	85%	83-86%		1639	1244	77%	75-79%	
African American	723	606	83%	80-86%		444	344	80%	75-83%	
Other	108	94	84%	73-91%		79	55	67%	54-78%	
Marital Status					**					**
Married or partner of unmarried couple	1737	1512	86%	84-88%		1242	1004	81%	78-83%	
Divorced or separated	570	478	84%	80-87%		366	268	74%	69-79%	
Widowed	634	508	79%	75-83%		338	213	63%	57-69%	
Never married	269	222	83%	76-88%		209	152	75%	68-81%	
Education					^					**
Less than high school	289	240	84%	78-88%		163	107	71%	63-79%	
High school grad or GED	993	823	82%	79-85%		583	421	73%	69-77%	
College 1-3 years	751	643	86%	83-89%		511	392	76%	72-80%	
College grad	693	581	83%	79-86%		522	419	81%	77-85%	
Advanced degree	480	431	89%	84-92%		373	297	81%	76-85%	
Employment Status					^					**
Employed for wages	1297	1128	87%	84-89%		959	781	82%	79-84%	
Self-employed	221	177	81%	74-86%		178	141	80%	72-86%	
Retired	1096	910	83%	80-85%		595	394	67%	62-71%	
Other	596	505	83%	79-87%		423	321	77%	72-81%	
Household Income					**					**
<$25,000	645	518	81%	76-84%		391	255	68%	62-73%	
$25,000-<$35,000	306	251	79%	73-84%		178	144	79%	71-86%	
$35,000-<$50,000	391	338	86%	81-89%		255	192	75%	68-80%	
$50,000-<$75,000	459	385	85%	81-88%		334	247	75%	69-80%	
$75,000 or greater	811	714	87%	83-89%		614	516	84%	80-87%	
Don't know/not sure	227	186	83%	76-88%		136	92	69%	60-77%	
Refused	365	324	88%	83-92%		240	187	81%	75-86%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 6-2 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**
Female Population	3255	3034	93%	91-94%		2118	1970	93%	91-94%		1137	1064	93%	91-94%	
Age					**					**					**
40-49 years	938	806	86%	84-88%		639	544	86%	83-89%		299	262	87%	82-91%	
50-64 years	1284	1242	96%	95-97%		834	806	96%	94-97%		450	436	97%	95-98%	
65-74 years	570	551	97%	95-98%		352	342	98%	96-99%		218	209	95%	91-98%	
75 years and older	463	435	94%	91-96%		293	278	94%	90-97%		170	157	94%	89-96%	
Race					^					^					^
White	2415	2260	93%	91-94%		1412	1325	93%	91-94%		1003	935	92%	90-94%	
African American	730	671	92%	90-94%		619	565	92%	90-94%		111	106	97%	92-99%	
Other	110	103	93%	85-97%		87	80	92%	84-96%		23	23	100%		
Marital Status					^					^					^
Married or partner of unmarried couple	1751	1640	93%	91-94%		1082	1011	93%	91-94%		669	629	93%	90-95%	
Divorced or separated	578	543	93%	90-95%		410	384	93%	90-96%		168	159	93%	85-97%	
Widowed	641	601	93%	90-95%		403	380	93%	89-96%		238	221	92%	88-95%	
Never married	273	239	88%	83-91%		213	186	87%	82-91%		60	53	90%	80-95%	
Education					**					**					^
Less than high school	298	272	89%	83-93%		172	155	88%	80-93%		126	117	94%	88-97%	
High school grad or GED	998	926	92%	90-94%		569	522	91%	88-94%		429	404	94%	90-96%	
College 1-3 years	759	694	91%	89-93%		503	459	92%	89-94%		256	235	90%	84-93%	
College grad	700	656	93%	90-95%		507	474	93%	90-95%		193	182	94%	89-97%	
Advanced degree	484	470	97%	95-98%		354	347	98%	95-99%		130	123	93%	83-97%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 6-2 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**
Employment Status					**					**					^
Employed for wages	1309	1221	93%	91-94%		902	841	93%	91-95%		407	380	92%	88-95%	
Self-employed	221	201	90%	85-94%		140	126	91%	84-95%		81	75	90%	78-96%	
Retired	1108	1062	96%	95-97%		681	657	97%	94-98%		427	405	95%	92-97%	
Other	605	538	87%	84-90%		387	338	86%	82-90%		218	200	92%	87-95%	
Household Income					**					^					**
<$25,000	650	582	89%	86-92%		375	336	89%	85-92%		275	246	88%	83-92%	
$25,000-<$35,000	311	296	95%	91-97%		199	186	94%	89-97%		112	110	98%	91-100%	
$35,000-<$50,000	395	361	90%	86-93%		249	223	89%	85-93%		146	138	93%	85-96%	
$50,000-<$75,000	463	426	91%	88-94%		290	269	92%	87-95%		173	157	90%	83-94%	
$75,000 or greater	816	783	95%	93-97%		588	561	95%	92-96%		228	222	97%	94-99%	
Don't know/not sure	230	218	94%	89-97%		152	142	93%	86-96%		78	76	98%	94-100%	
Refused	372	351	93%	89-96%		253	241	94%	89-97%		119	110	90%	80-95%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 6-3 WOMEN REPORTING TO HAVE HAD A MAMMOGRAM IN THE LAST 2 YEARS, 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**
Female Population	3255	2724	83%	82-85%		2118	1764	83%	81-85%		1137	960	84%	81-86%	
Age					**					**					**
40-49 years	938	712	77%	74-80%		639	481	77%	73-80%		299	231	77%	71-82%	
50-64 years	1284	1130	88%	86-90%		834	731	87%	85-90%		450	399	90%	86-92%	
65-74 years	570	506	90%	87-92%		352	314	90%	87-93%		218	192	87%	81-92%	
75 years and older	463	376	81%	76-85%		293	238	81%	75-85%		170	138	82%	75-88%	
Race					^					^					^
White	2415	2017	83%	81-84%		1412	1177	83%	80-85%		1003	840	83%	80-86%	
African American	730	615	85%	82-88%		619	517	84%	81-87%		111	98	89%	81-94%	
Other	110	92	84%	74-90%		87	70	83%	73-89%		23	22	96%	73-99%	
Marital Status					^					^					^
Married or partner of unmarried couple	1751	1498	85%	82-86%		1082	922	84%	82-87%		669	576	85%	82-88%	
Divorced or separated	578	475	82%	78-85%		410	335	82%	78-86%		168	140	81%	73-87%	
Widowed	641	525	82%	78-85%		403	333	82%	77-86%		238	192	80%	74-85%	
Never married	273	217	80%	75-85%		213	167	79%	73-85%		60	50	87%	76-93%	
Education					**					**					^
Less than high school	298	229	75%	69-81%		172	129	73%	65-80%		126	100	82%	74-88%	
High school grad or GED	998	840	84%	81-86%		569	471	84%	80-87%		429	369	85%	80-88%	
College 1-3 years	759	619	82%	79-85%		503	414	83%	80-87%		256	205	79%	73-84%	
College grad	700	595	84%	81-87%		507	427	84%	80-87%		193	168	87%	80-91%	
Advanced degree	484	428	87%	83-90%		354	313	87%	82-90%		130	115	88%	79-93%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 6-3 WOMEN REPORTING TO HAVE HAD A MAMMOGRAM IN THE LAST 2 YEARS, 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**
Employment Status					**					**					^
Employed for wages	1309	1131	86%	84-88%		902	784	87%	84-89%		407	347	84%	80-88%	
Self-employed	221	175	79%	72-84%		140	108	78%	70-85%		81	67	81%	69-89%	
Retired	1108	954	86%	84-88%		681	589	87%	83-89%		427	365	85%	81-89%	
Other	605	454	74%	69-78%		387	277	72%	66-76%		218	177	81%	75-86%	
Household Income					**					**					^
<$25,000	650	496	75%	71-79%		375	281	75%	69-79%		275	215	78%	71-83%	
$25,000-<$35,000	311	265	86%	81-90%		199	170	86%	80-91%		112	95	85%	76-91%	
$35,000-<$50,000	395	325	81%	76-85%		249	198	80%	73-84%		146	127	85%	77-91%	
$50,000-<$75,000	463	386	83%	79-87%		290	242	84%	78-88%		173	144	82%	74-88%	
$75,000 or greater	816	718	87%	84-89%		588	514	86%	82-89%		228	204	89%	84-93%	
Don't know/not sure	230	192	83%	76-88%		152	123	82%	74-88%		78	69	88%	76-94%	
Refused	372	329	88%	83-91%		253	226	89%	83-92%		119	103	84%	75-91%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 6-4 RESPONSES TO THE QUESTION "WHAT WAS THE MOST IMPORTANT REASON YOU HAVE NEVER HAD/NOT HAD A MAMMOGRAM IN THE LAST 2 YEARS?"*

Selected Response	wt %
Doctor didn't order it/didn't say I needed it	13%
No reason, never thought about it	16%
Didn't need/ didn't know I needed this type of test	8%
Haven't had any problems	10%
Put it off/didn't get around to it	19%
Too expensive/no insurance/cost of test	11%
Too painful, unpleasant, or embarrassing	6%
Don't have a doctor	1%
Didn’t want to know I had cancer	3%
Too young	4%
No family history	2%
Don't know/ not sure of the reason	2%

*Question asked of 535 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.

Maryland Cancer Survey, 2004

TABLE 6-5 WOMEN REPORTING TO HAVE EVER HAD A CLINICAL BREAST EXAM (CBE), 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**
Female Population	3240	3094	96%	95-96%		2107	2014	96%	94-96%		1133	1080	96%	95-97%	
Age					**					**					**
40-49 years	936	908	96%	94-98%		638	614	96%	93-97%		298	294	98%	95-99%	
50-64 years	1279	1232	97%	95-98%		830	801	97%	95-98%		449	431	96%	94-98%	
65-74 years	566	543	96%	93-98%		349	336	96%	92-98%		217	207	96%	93-98%	
75 years and above	459	411	91%	87-93%		290	263	91%	87-94%		169	148	89%	83-93%	
Race					**					**					^
White	2407	2306	96%	95-97%		1408	1353	96%	95-97%		999	953	96%	95-97%	
African American	727	695	96%	94-97%		616	590	96%	93-97%		111	105	96%	90-98%	
Other	106	93	85%	75-92%		83	71	84%	73-92%		23	22	96%	74-99%	
Marital Status					**					**					**
Married or partner of unmarried couple	1745	1693	97%	96-98%		1077	1046	97%	96-98%		668	647	97%	95-98%	
Divorced or separated	577	556	96%	93-98%		409	393	96%	92-98%		168	163	98%	94-99%	
Widowed	635	578	91%	88-93%		399	365	91%	87-94%		236	213	92%	87-94%	
Never married	271	255	94%	90-96%		212	200	94%	89-97%		59	55	93%	81-98%	
Education					**					**					**
Less than high school	294	264	90%	85-94%		169	154	90%	83-95%		125	110	89%	82-94%	
High school grad or GED	995	932	94%	91-95%		567	527	93%	90-95%		428	405	95%	92-97%	
College 1-3 years	757	731	97%	95-98%		503	484	96%	94-98%		254	247	98%	95-99%	
College grad	696	680	98%	97-99%		504	494	98%	96-99%		192	186	98%	94-99%	
Advanced degree	483	473	98%	96-99%		352	344	98%	95-99%		131	129	99%	96-100%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 6-5 WOMEN REPORTING TO HAVE EVER HAD A CLINICAL BREAST EXAM (CBE), AMONG THOSE AGE 40 YEARS AND ABOVE

	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**
Employment Status					^					^					^
Employed for wages	1307	1262	97%	96-98%		900	872	97%	96-98%		407	390	96%	94-98%	
Self-employed	221	215	96%	89-98%		140	136	95%	86-98%		81	79	98%	93-100%	
Retired	1099	1033	94%	92-96%		674	635	94%	92-96%		425	398	94%	91-96%	
Other	601	572	95%	92-97%		385	363	94%	91-96%		216	209	97%	94-99%	
Household Income					**					**					**
<$25,000	646	594	92%	89-94%		371	343	92%	88-95%		275	251	92%	88-95%	
$25,000-<$35,000	310	293	93%	89-96%		199	185	92%	87-96%		111	108	97%	92-99%	
$35,000-<$50,000	393	377	95%	91-97%		247	235	94%	90-97%		146	142	96%	90-99%	
$50,000-<$75,000	461	454	98%	96-99%		288	283	98%	95-99%		173	171	99%	97-100%	
$75,000 or greater	816	799	98%	97-99%		588	576	98%	97-99%		228	223	99%	96-99%	
Don't know/not sure	228	212	94%	89-96%		151	141	94%	88-97%		77	71	93%	85-97%	
Refused	368	348	94%	91-97%		251	240	95%	90-97%		117	108	93%	85-97%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

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

	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**
Female Population	2183	2149	98%	98-99%		1471	1447	98%	97-99%		712	702	98%	98-100%	
Age					**					^					**
40-49 years	764	757	99%	98-99%		530	523	99%	97-99%		234	234	100%		
50-64 years	867	860	99%	98-100%		586	581	99%	98-100%		281	279	100%	98-100%	
65-74 years	309	300	97%	93-99%		193	186	96%	91-98%		116	114	99%	94-100%	
75 years and above	243	232	96%	92-98%		162	157	96%	91-99%		81	75	94%	87-97%	
Race					^					^					^
White	1653	1626	98%	98-99%		1021	1003	98%	97-99%		632	623	99%	98-99%	
African American	451	446	99%	97-100%		385	381	99%	97-100%		66	65	99%	95-100%	
Other	79	77	96%	84-99%		65	63	95%	83-99%		14	14	100%		
Marital Status					**					^					**
Married or partner of unmarried couple	1253	1243	99%	98-99%		804	795	99%	98-99%		449	448	100%	98-100%	
Divorced or separated	370	367	99%	97-100%		262	259	99%	96-100%		108	108	100%		
Widowed	342	330	97%	93-98%		232	227	97%	92-99%		110	103	94%	87-97%	
Never married	211	203	96%	91-98%		167	160	96%	90-98%		44	43	99%	90-100%	
Education					^					^					**
Less than high school	166	159	97%	93-99%		99	97	98%	92-100%		67	62	94%	86-98%	
High school grad or GED	588	579	98%	96-99%		348	342	98%	95-99%		240	237	99%	97-100%	
College 1-3 years	516	510	99%	97-99%		347	341	98%	96-99%		169	169	100%		
College grad	526	522	99%	97-100%		394	390	99%	97-100%		132	132	100%		
Advanced degree	377	371	98%	95-99%		275	270	98%	95-99%		102	101	99%	96-100%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

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

	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**
Employment Status					^					^					**
Employed for wages	970	961	99%	98-99%		691	682	99%	97-99%		279	279	100%		
Self-employed	179	177	99%	94-100%		114	113	99%	92-100%		65	64	99%	92-100%	
Retired	597	581	97%	95-98%		372	362	97%	94-98%		225	219	98%	95-99%	
Other	430	425	99%	97-100%		289	286	99%	96-100%		141	139	99%	97-100%	
Household Income					**					**					**
<$25,000	393	377	96%	93-98%		237	229	96%	91-98%		156	148	96%	91-98%	
$25,000-<$35,000	179	176	97%	92-99%		114	111	97%	90-99%		65	65	100%		
$35,000-<$50,000	257	253	97%	93-99%		168	164	97%	91-99%		89	89	100%		
$50,000-<$75,000	336	333	99%	97-100%		211	208	99%	96-100%		125	125	100%		
$75,000 or greater	621	619	100%	98-100%		462	460	99%	98-100%		159	159	100%		
Don't know/not sure	140	137	99%	96-100%		97	95	99%	95-100%		43	42	99%	90-100%	
Refused	243	242	100%	98-100%		174	173	100%	97-100%		69	69	100%		

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 6-7 WOMEN REPORTING TO HAVE HAD A PAP SMEAR IN THE LAST 3 YEARS, AMONG THOSE AGE 40 YEARS AND OLDER WHO HAVE NOT HAD A HYSTERECTOMY

	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**
Female Population	2183	1937	90%	88-91%		1471	1321	90%	89-92%		712	616	87%	84-90%	
Age					**					**					**
40-49 years	764	711	93%	90-94%		530	494	93%	90-95%		234	217	91%	86-94%	
50-64 years	867	792	92%	89-94%		586	537	92%	89-94%		281	255	91%	86-94%	
65-74 years	309	268	87%	81-91%		193	167	86%	79-91%		116	101	89%	81-93%	
75 years and above	243	166	75%	68-80%		162	123	79%	71-85%		81	43	59%	47-69%	
Race					^					^					**
White	1653	1460	90%	88-91%		1021	919	91%	89-92%		632	541	86%	83-89%	
African American	451	411	91%	87-94%		385	348	90%	87-93%		66	63	96%	89-99%	
Other	79	66	86%	75-92%		65	54	86%	74-93%		14	12	89%	62-98%	
Marital Status					**					**					**
Married or partner of unmarried couple	1253	1154	92%	90-93%		804	746	92%	90-94%		449	408	90%	86-93%	
Divorced or separated	370	335	90%	86-93%		262	238	90%	85-94%		108	97	88%	79-93%	
Widowed	342	263	79%	74-83%		232	188	81%	75-86%		110	75	69%	59-77%	
Never married	211	179	87%	81-91%		167	143	87%	81-92%		44	36	86%	73-93%	
Education					**					**					**
Less than high school	166	119	77%	68-83%		99	74	78%	68-86%		67	45	70%	58-80%	
High school grad or GED	588	513	88%	85-91%		348	305	89%	85-92%		240	208	85%	80-90%	
College 1-3 years	516	465	90%	87-93%		347	313	91%	87-94%		169	152	89%	83-94%	
College grad	526	487	93%	91-95%		394	371	94%	91-96%		132	116	89%	82-94%	
Advanced degree	377	346	92%	89-95%		275	252	92%	88-95%		102	94	95%	90-97%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 6-7 WOMEN REPORTING TO HAVE HAD A PAP SMEAR IN THE LAST 3 YEARS, AMONG THOSE AGE 40 YEARS AND OLDER WHO HAVE NOT HAD A HYSTERECTOMY

	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**
Employment Status					**					**					^
Employed for wages	970	903	94%	92-95%		691	651	94%	92-96%		279	252	90%	85-93%	
Self-employed	179	166	93%	87-96%		114	106	93%	86-97%		65	60	92%	81-97%	
Retired	597	491	84%	80-87%		372	311	85%	80-88%		225	180	81%	76-86%	
Other	430	372	86%	82-89%		289	249	86%	81-90%		141	123	87%	79-92%	
Household Income					**					**					**
<$25,000	393	311	80%	75-84%		237	189	80%	73-85%		156	122	80%	72-86%	
$25,000-<$35,000	179	163	90%	83-94%		114	103	89%	81-94%		65	60	91%	81-96%	
$35,000-<$50,000	257	221	87%	82-91%		168	147	89%	82-93%		89	74	84%	73-91%	
$50,000-<$75,000	336	306	91%	87-94%		211	198	93%	88-96%		125	108	86%	78-92%	
$75,000 or greater	621	594	95%	93-97%		462	441	96%	93-97%		159	153	95%	89-98%	
Don't know/not sure	140	118	86%	78-91%		97	80	85%	75-91%		43	38	93%	84-97%	
Refused	243	216	90%	85-93%		174	157	91%	85-95%		69	59	84%	72-92%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

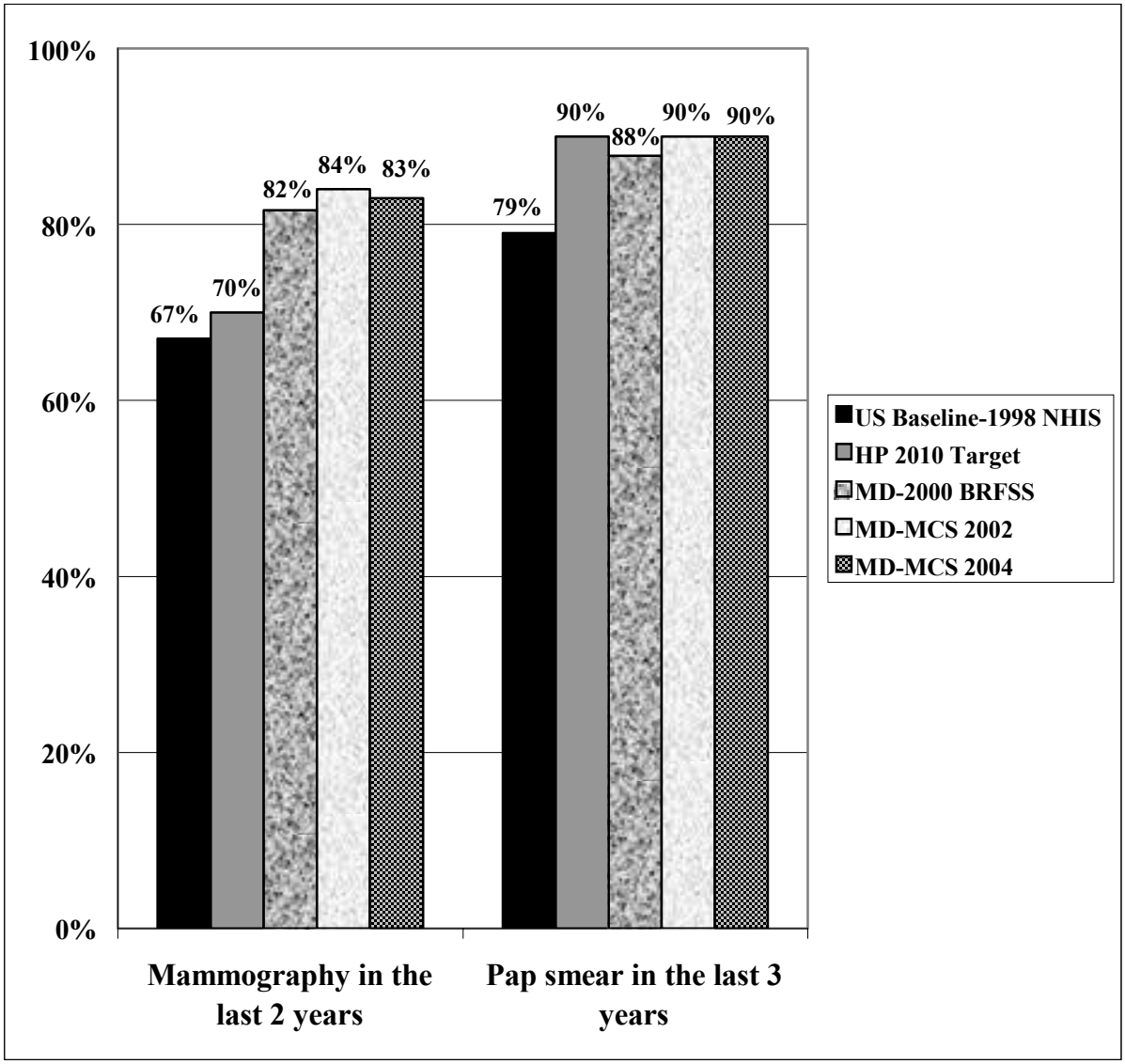
TABLE 6-8 RESPONSES TO THE QUESTION "WHAT WAS THE MOST IMPORTANT REASON YOU HAVE NEVER HAD/NOT HAD A PAP SMEAR IN THE LAST 3 YEARS?"*

Selected Response	wt %
Doctor didn't order it/didn't say I needed it	10%
No reason, never thought about it	24%
Didn't need/ didn't know I needed this type of test	10%
Haven't had any problems	13%
Put it off/didn't get around to it	13%
Too expensive/no insurance/cost of test	10%
Too painful, unpleasant, or embarrassing	2%
Don't have a doctor/ Have not visted a doctor	4%
Don't know/ not sure of the reason	6%

*Question asked of 246 female respondents, age 40 years or older (who have not had a hysterectomy), who reported they have never had a Pap smear or have not had a Pap smear in the last three years. More than one response could be given per respondent.

Maryland Cancer Survey, 2004

Chart 6-1 Proportion of women age 40 years and older who have had a mammogram in the last 2 years and had a Pap smear in the last 3 years (among women that have not had a hysterectomy); comparison of the results of the Maryland Cancer Survey, 2004 to national baselines, Healthy People 2010 target values, and previous Maryland surveys.



NHIS-National Health Interview Survey
HP 2010 Target-Healthy People 2010 Target
BRFSS-Behavioral Risk Factor Surveillance System Survey
MD-MCS 2002-Maryland Cancer Survey, 2002
MD-MCS 2004-Maryland Cancer Survey, 2004

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 2001, there were 497 new cases and 141 deaths from oral cancer among Maryland residents. Among the 50 states and the District of Columbia, Maryland ranked 12th highest for oral cancer mortality during 1997-2001.[1]

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. Among Marylanders, age 40 years and older, 43% report that they have ever had an oral cancer screening exam (Table 7-1). While no difference in screening prevalence was seen by age in rural areas, those 40-49 years living in urban areas were less likely to report being screened. Whites had higher screening prevalence than either African Americans or people of other races (48% vs. 31% and 30% respectively). Those who reported their marital status as married or the partner of an unmarried couple were more likely to have an oral screening exam. Screening increased as education level and annual household income increased. 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, 11% by a dental hygienist, 7% by a physician, and the remainder by other health care providers (data not shown in tables).

One Healthy People 2010 objective is to increase the proportion of adults, age 40 years and older, who have had an oral cancer exam in the last 12 months to 20%. Thirty-four percent (34%) of Marylanders age 40 years and older reported they had an oral cancer exam within the preceding year (Table 7-2), exceeding the Healthy People 2010 objective measure (Chart 7-1).[2] Thirty-eight percent (38%) have had the exam within the last 2 years. White women reported the highest prevalence of recent screening (41%) followed by white men (36%). People who were married or the partner of an unmarried couple reported higher rates of screening within the past year. As annual household income or education level increased, so did the percentage of Marylanders who reported oral cancer screening.

Visits to the dentist for routine care are very important since over 90% of Marylanders 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 objective regarding regular dental care is to increase to 56%[2] the proportion of children and adults (all ages) who use the oral health system (Chart 7-1). Seventy-six percent (76%) of Marylanders aged 40 years and older reported that they had visited a dentist or dental clinic in the last year for any reason (Table 7-3). A lower percentage of African American men and women reported visiting a dentist or dental clinic in the last year than did whites or people of other races. Having been to the dentist in the last year varied with marital status, education, employment, and income. People who were married

[1] Annual Cancer Report, Cigarette Restitution Fund Program, September 2004, Department of Health and Mental Hygiene,. http://www.fha.state.md.us/cancer/html/crf_ann_can_rpt.html
[2] Healthy People 2010, US Department of Health and Human Services, 2000. http://www.healthypeople.gov/document/HTML/Volume2/21Oral.htm

or a partner of an unmarried couple were more likely to see a dentist in the last year, as were college graduates or people who had an advanced degree. People who reported their employment status as "other" were less likely to have visited the dentist. As annual household income increased, so did visits to the dentist in the last year, from 51% of those with an income of less than $25,000 to 86% of people earning $75,000 or more.

While 76% have visited a dentist in the last year (for any reason) and 82% of Marylanders saw a physician for a routine check-up in the last year, only 34% reported having had 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 where an oral cancer exam is more likely to be done. 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. Fifty percent (50%) of people who visited a dentist in the last year reported they have **ever had** an oral cancer screening exam, compared to 21% who saw a dentist more than 3 but less than 5 years before, and 18% who had a dental visit 5 or more years ago. Of the people who visited a dentist in the last year for any reason, 44% 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 ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4765	2130	43%	42-45%		3082	1361	43%	41-45%		1683	769	46%	43-48%	
Gender					^					^					^
Male	1641	716	42%	39-45%		1055	466	42%	38-45%		586	250	43%	39-48%	
Female	3124	1414	44%	42-46%		2027	895	43%	41-46%		1097	519	48%	44-51%	
Age					**					**					^
40-49 years	1384	591	40%	37-43%		923	378	38%	35-42%		461	213	46%	41-51%	
50-64 years	1879	872	46%	43-48%		1197	556	45%	42-48%		682	316	47%	42-51%	
65 years and above	1502	667	45%	42-48%		962	427	45%	41-48%		540	240	44%	39-49%	
Race					**					**					^
White	3586	1761	48%	46-50%		2094	1057	49%	46-51%		1492	704	47%	44-50%	
African American	1014	317	31%	28-34%		860	263	30%	27-34%		154	54	38%	30-48%	
Other	165	52	30%	23-40%		128	41	30%	22-40%		37	11	38%	18-64%	
Gender and Race					**					**					^
White male	1273	596	46%	43-49%		749	366	47%	43-51%		524	230	44%	39-49%	
African American male	305	101	32%	27-38%		259	84	31%	25-38%		46	17	41%	26-57%	
Other male	63	19	30%	18-46%		47	16	31%	18-48%		16	3	20%	4-60%	
White female	2313	1165	50%	48-53%		1345	691	51%	48-54%		968	474	49%	46-53%	
African American female	709	216	30%	26-34%		601	179	29%	25-34%		108	37	36%	26-47%	
Other female	102	33	31%	21-42%		81	25	29%	19-41%		21	8	54%	25-80%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 7-1 PEOPLE REPORTING THEY HAVE EVER HAD AN ORAL CANCER SCREENING EXAM, 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**
Marital Status					**					**					**
Married or partner of unmarried couple	2789	1374	47%	45-49%		1728	848	46%	44-49%		1061	526	49%	46-53%	
Divorced or separated	774	298	37%	33-41%		531	207	37%	32-42%		243	91	36%	29-43%	
Widowed	751	276	35%	32-39%		482	167	35%	30-40%		269	109	38%	32-44%	
Never married	435	179	36%	31-42%		330	137	35%	30-42%		105	42	40%	29-52%	
Education					**					**					**
Less than high school	422	94	21%	17-26%		242	51	20%	15-26%		180	43	24%	18-32%	
High school grad or GED	1392	507	35%	32-39%		776	271	35%	31-39%		616	236	38%	33-42%	
College 1-3 years	1066	494	43%	39-47%		687	295	40%	36-45%		379	199	53%	47-58%	
College grad	1065	555	49%	45-52%		753	378	47%	43-51%		312	177	56%	50-62%	
Advanced degree	793	472	59%	55-63%		604	359	59%	55-64%		189	113	61%	53-69%	
Employment Status					**					**					^
Employed for wages	2009	908	43%	40-46%		1353	608	42%	39-45%		656	300	45%	41-50%	
Self-employed	392	203	50%	44-56%		249	136	51%	44-58%		143	67	47%	37-56%	
Retired	1650	749	46%	43-48%		1024	456	45%	42-49%		626	293	46%	42-51%	
Other	693	262	35%	31-40%		441	155	33%	28-38%		252	107	45%	38-52%	
Household Income					**					**					**
<$25,000	847	223	24%	20-27%		494	119	22%	18-26%		353	104	29%	24-35%	
$25,000-<$35,000	423	182	41%	36-47%		265	113	41%	35-48%		158	69	42%	33-51%	
$35,000-<$50,000	610	267	41%	37-46%		361	152	40%	35-46%		249	115	44%	37-51%	
$50,000-<$75,000	734	374	47%	43-51%		471	229	45%	40-50%		263	145	54%	48-61%	
$75,000 or greater	1353	738	52%	49-55%		962	517	51%	48-55%		391	221	56%	51-62%	
Don't know/not sure	261	94	35%	28-42%		171	61	35%	27-43%		90	33	34%	24-46%	
Refused	513	241	44%	39-50%		343	162	45%	39-51%		170	79	43%	35-52%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

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 ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4765	1689	34%	32-35%		3082	1064	33%	31-35%		1683	625	37%	34-39%	
Gender					^					^					**
Male	1641	551	32%	30-35%		1055	357	32%	29-35%		586	194	33%	29-37%	
Female	3124	1138	35%	33-37%		2027	707	34%	32-36%		1097	431	40%	37-43%	
Age					**					**					^
40-49 years	1384	464	31%	28-34%		923	295	30%	26-33%		461	169	36%	31-41%	
50-64 years	1879	710	36%	34-39%		1197	452	36%	33-39%		682	258	37%	33-41%	
65 years and above	1502	515	34%	32-37%		962	317	33%	30-37%		540	198	37%	33-42%	
Race					**					**					**
White	3586	1428	39%	37-41%		2094	850	39%	37-42%		1492	578	38%	35-41%	
African American	1014	220	21%	18-24%		860	178	20%	17-24%		154	42	31%	23-40%	
Other	165	41	25%	18-34%		128	36	26%	18-36%		37	5	9%	3-23%	
Gender and Race					**					**					**
White male	1273	470	36%	33-39%		749	290	37%	33-41%		524	180	34%	29-38%	
African American male	305	64	21%	16-26%		259	51	19%	14-25%		46	13	33%	20-50%	
Other male	63	17	29%	17-44%		47	16	31%	18-48%		16	1	3%	0.4-19%	
White female	2313	958	41%	39-45%		1345	560	41%	38-44%		968	398	42%	38-45%	
African American female	709	156	22%	18-25%		601	127	21%	17-25%		108	29	29%	20-39%	
Other female	102	24	22%	14-33%		81	20	23%	14-34%		21	4	15%	5-39%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

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 ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Marital Status					**					**					**
Married or partner of unmarried couple	2789	1111	37%	35-39%		1728	676	37%	34-39%		1061	435	40%	37-43%	
Divorced or separated	774	224	27%	23-31%		531	153	27%	23-31%		243	71	26%	20-33%	
Widowed	751	213	26%	23-30%		482	131	26%	22-30%		269	82	28%	23-34%	
Never married	435	139	28%	24-34%		330	103	27%	22-33%		105	36	35%	25-47%	
Education					**					**					**
Less than high school	422	56	12%	9-16%		242	28	11%	7-16%		180	28	16%	11-24%	
High school grad or GED	1392	386	27%	24-30%		776	207	26%	23-30%		616	179	29%	25-33%	
College 1-3 years	1066	383	33%	29-36%		687	226	30%	27-34%		379	157	41%	35-47%	
College grad	1065	465	40%	37-44%		753	306	38%	34-42%		312	159	50%	44-56%	
Advanced degree	793	397	49%	45-53%		604	296	49%	44-53%		189	101	51%	43-59%	
Employment Status					**					**					^
Employed for wages	2009	752	35%	32-37%		1353	500	34%	31-37%		656	252	37%	33-42%	
Self-employed	392	154	38%	33-44%		249	103	40%	33-47%		143	51	34%	25-43%	
Retired	1650	583	35%	32-38%		1024	346	34%	31-38%		626	237	38%	33-42%	
Other	693	197	26%	23-30%		441	114	24%	20-29%		252	83	35%	28-42%	
Household Income					**					**					**
<$25,000	847	158	17%	14-20%		494	78	15%	11-19%		353	80	23%	18-28%	
$25,000-<$35,000	423	131	30%	25-35%		265	82	29%	24-36%		158	49	30%	23-39%	
$35,000-<$50,000	610	206	30%	26-34%		361	113	28%	23-34%		249	93	34%	28-41%	
$50,000-<$75,000	734	299	38%	34-42%		471	182	36%	32-41%		263	117	44%	37-50%	
$75,000 or greater	1353	622	43%	40-46%		962	430	42%	39-46%		391	192	47%	41-52%	
Don't know/not sure	261	72	24%	18-30%		171	47	23%	17-31%		90	25	26%	17-37%	
Refused	513	193	35%	31-41%		343	127	35%	30-41%		170	66	36%	28-45%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 7-3 PEOPLE REPORTING DENTAL VISITS DURING THE PAST YEAR, AMONG THOSE 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**
Total Population	4969	3782	76%	74-77%		3217	2497	77%	75-78%		1752	1285	74%	71-76%	
Gender					^					^					^
Male	1737	1314	75%	72-77%		1111	855	75%	72-78%		626	459	73%	69-77%	
Female	3232	2468	77%	75-79%		2106	1642	78%	76-80%		1126	826	74%	71-76%	
Age					**					^					^
40-49 years	1441	1111	76%	73-79%		960	753	77%	73-80%		481	358	73%	68-77%	
50-64 years	1971	1551	78%	76-80%		1264	1015	79%	76-81%		707	536	76%	73-80%	
65 years and above	1557	1120	73%	70-75%		993	729	73%	70-76%		564	391	71%	66-75%	
Race					**					**					**
White	3754	2973	80%	78-81%		2197	1804	81%	79-83%		1557	1169	76%	73-78%	
African American	1038	682	65%	61-68%		881	590	66%	62-69%		157	92	57%	48-66%	
Other	177	127	75%	66-82%		139	103	76%	67-83%		38	24	57%	34-78%	
Gender and Race					**					**					**
White male	1353	1058	78%	75-81%		790	635	79%	75-82%		563	423	76%	72-80%	
African American male	316	205	62%	56-68%		268	178	63%	56-70%		48	27	55%	39-69%	
Other male	68	51	80%	66-89%		53	42	81%	66-90%		15	9	64%	30-88%	
White female	2401	1915	81%	80-83%		1407	1169	83%	81-85%		994	746	76%	73-79%	
African American female	722	477	67%	63-71%		613	412	67%	63-71%		109	65	60%	49-70%	
Other female	109	76	71%	60-80%		86	61	72%	61-82%		23	15	52%	24-79%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 7-3 PEOPLE REPORTING DENTAL VISITS DURING THE PAST YEAR, AMONG THOSE 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**
Marital Status					**					**					**
Married or partner of unmarried couple	2915	2351	80%	78-81%		1808	1489	80%	78-83%		1107	862	77%	74-80%	
Divorced or separated	816	583	71%	67-75%		561	416	73%	68-77%		255	167	63%	56-71%	
Widowed	768	507	64%	60-68%		489	332	64%	59-69%		279	175	63%	56-69%	
Never married	453	328	69%	63-75%		347	252	70%	63-76%		106	76	68%	55-78%	
Education					**					**					**
Less than high school	429	191	44%	38-50%		245	110	43%	36-50%		184	81	47%	39-56%	
High school grad or GED	1444	1014	70%	67-73%		802	571	71%	67-74%		642	443	69%	65-73%	
College 1-3 years	1112	851	76%	73-79%		719	552	77%	73-80%		393	299	75%	70-80%	
College grad	1116	956	84%	81-87%		791	675	83%	80-86%		325	281	86%	81-90%	
Advanced degree	841	750	89%	86-91%		639	573	89%	86-92%		202	177	86%	78-91%	
Employment Status					**					**					**
Employed for wages	2105	1696	80%	77-82%		1420	1161	80%	77-82%		685	535	78%	74-81%	
Self-employed	413	323	78%	72-83%		259	213	80%	73-85%		154	110	71%	61-78%	
Retired	1711	1258	73%	71-76%		1060	788	74%	71-77%		651	470	73%	69-76%	
Other	719	486	68%	63-72%		462	321	69%	64-74%		257	165	64%	57-70%	
Household Income					**					**					**
<$25,000	861	460	51%	46-55%		500	267	50%	45-56%		361	193	52%	45-58%	
$25,000-<$35,000	442	301	68%	63-73%		276	194	71%	64-76%		166	107	62%	52-70%	
$35,000-<$50,000	634	490	75%	70-79%		380	296	74%	68-79%		254	194	76%	70-81%	
$50,000-<$75,000	773	648	82%	78-85%		494	414	82%	78-86%		279	234	82%	76-87%	
$75,000 or greater	1424	1226	86%	83-88%		1009	879	86%	83-88%		415	347	83%	79-87%	
Don't know/not sure	276	189	65%	57-72%		184	130	66%	57-74%		92	59	60%	48-71%	
Refused	535	445	82%	77-86%		359	303	82%	77-86%		176	142	82%	74-87%	

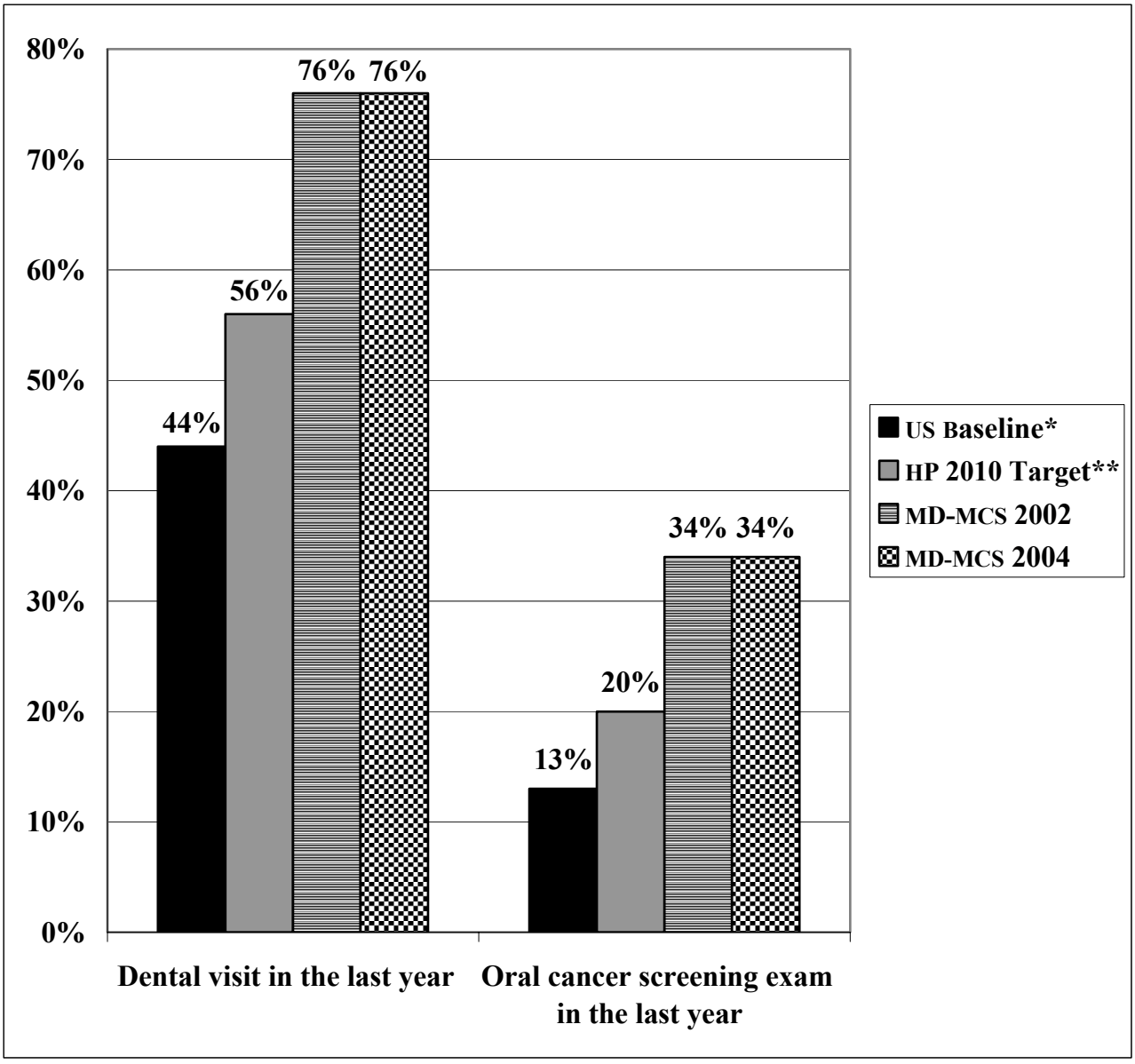
~ Some data missing for marital status, education, and employment status

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

Chart 7-1 Proportion of people age 40 years and older who have visited the dentist in the last year and had an oral cancer screening test in the last year; comparison of the results of the Maryland Cancer Survey, 2004 to national baselines, Healthy People 2010 target values, and the Maryland Cancer Survey, 2002.



* Baseline value for dental visits in the last year is from the Medical Expenditure Panel Survey 1996
* Baseline value for oral cancer screening in the last year is from the National Health Interview Survey 1998
** HP 2010 Target-Healthy People 2010 target for dental visits in the last year is for children and adults.
** HP 2010 Target-Healthy People 2010 Target for oral cancer screening in the last year is for adults age 40 years and older.
MD-MCS 2002-Maryland Cancer Survey, 2002
MD-MCS 2004-Maryland Cancer Survey, 2004

Chapter 8. Methods to Prevent Sun Exposure

Skin cancer, including non-melanoma (squamous and basal cell cancers) and melanoma skin cancer, is the most common form of cancer in the United States.[1] Excess exposure to ultraviolet (UV) radiation has long been linked to skin cancer. Exposure to the sun's UV rays appears to be the most important preventable factor in the development of skin cancer.[2] Healthy People 2010 recommends four ways to protect the skin from sun exposure and to reduce the risk of skin cancer: to avoid the sun between the hours of 10 a.m. and 4 p.m., to wear sun-protective clothing when exposed to sunlight, to use sunscreen with a sun-protective factor (SPF) of 15 or higher, and to avoid artificial sources of UV light.[3] This survey assessed how frequently people report that they adopted these recommended behaviors.

Forty-two percent (42%) of people age 40 years and older report they always or nearly always avoid the sun between the hours of 10 a.m. and 4 p.m. (Table 8-1). Women are more likely to avoid the sun than men (49% vs. 34%); this holds true for women of all races. People in the older age group (65 years and above) are more likely to avoid the sun during these peak exposure hours.

To determine how often people protected their skin from the sun when outside, people were asked about their use of sunscreen, hats, and other protective clothing (Table 8-1). Thirty-four percent (34%) reported they always or nearly always use sunscreen with an SPF rating of at least 15 when outdoors for an hour or more on a sunny day. White females were statistically significantly more likely to use sunscreen than were African American females, females of other races, and men of all races. Statistically significant differences were also observed by marital status, education, employment status, and income. People who are married or are the partner of an unmarried couple were more likely to use sunscreen. There was increased use of sunscreen with increasing levels of education or income.

Twenty-five percent (25%) of Marylanders age 40 years and older reported they always or nearly always wear a wide-brimmed hat or other hat that shades their faces, ears, and necks when outdoors for an hour or more on a sunny day. People age 65 years and older were most likely (37%) to wear a wide-brimmed hat compared to younger age groups. African Americans were more likely (29%) to always or nearly always wear a protective hat. There was no difference by annual income. There was a statistically significant difference by educational level, but no trend was observed.

Twenty-eight percent (28%) of Marylanders age 40 years and older reported they always or nearly always wear protective clothing, such as a long sleeved shirt or long pants, when outdoors for an hour or more on a sunny day. There was no significant difference by gender. However, when both race and gender were examined together, African American men and

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[1] What you need to know about skin cancer. NIH Publication, 2002. No. 95-1564. http://www.cancer.gov/cancerinfo/wyntk/skin#1

[2] Skin Cancer Prevention and Early Detection, American Cancer Society, http://www.cancer.org/docroot/PED/content/ped_7_1_Skin_Cancer_Detection_What_You_Can_Do.asp?sitearea=PED

[3] Healthy People 2010, Goals to prevent excess sun exposure. US Department of Health and Human Services, 2000. http://www.healthypeople.gov/document/HTML/Volume1/03Cancer.htm

women, and women of other races were more likely to wear protective clothing than white men and women. Differences in wearing protective clothing when outdoors for an hour or more on a sunny day were also seen by age, marital status, education, employment status, and income. The percentage of people who used protective clothing increased with age. The use of protective clothing decreased with increasing educational level or annual income. People who are retired or widowed were more likely to wear protective clothing.

Only 5% of Marylanders, age 40 and above, reported they used artificial UV light such as tanning beds or tanning lamps in the past year (data not shown in tables). White women reported the highest prevalence of artificial UV light use (8%), followed by men of other races and white men (4% each), and women of other races (3%). Of those who reported artificial UV light exposure in the last year, 67% were white women and 26% were white men.

One of the objectives of HP 2010 is to increase the proportion of adults *age 18 years and older* who use at least one form of sun protection to 75%. The national baseline from the 1998 National Health Interview Survey is 47%.[3] The 2004 MCS found 71% of Marylanders, *age 40 years and older*, always or almost always use at least one of the following methods: sun avoidance, sunscreen, wear a protective hat, or wear other protective clothing (Table 8-2). Women were more likely to use at least one method of sun protection than men, as were people age 65 years and older. Men of other races were least likely to use at least one sun protective measure. HP 2010 also recommends avoiding sources of artificial ultraviolet light, which is a behavior practiced by only a small percent of adults age 40 years and older.

TABLE 8-1 PEOPLE WHO REPORT THAT THEY USE METHODS TO PREVENT SUN EXPOSURE BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE AGE 40 YEARS AND OLDER

	People reporting they always or nearly always avoid the sun between the hours of 10 a.m. and 4 p.m. ~					People reporting they always or nearly always use sunscreen with a SPF rating of 15 or higher when outdoors for an hour or more on a sunny day ~					People reporting they always or nearly always wear a wide-brimmed hat or other hat that shades their face, ears, and neck when outdoors for an hour or more on a sunny day ~					People reporting they always or nearly always wear protective clothing like a long sleeved shirt or long pants when outdoors for an hour or more on a sunny day ~				
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**
Total Population	4904	2131	42%	40-44%		4803	1744	34%	32-35%		4822	1232	25%	24-27%		4784	1370	28%	27-30%	
Area of Residence					**					^					^					**
Urban	3174	1412	43%	41-45%		3112	1128	34%	32-36%		3123	810	26%	24-27%		3099	932	29%	27-31%	
Rural	1730	719	38%	36-41%		1691	616	34%	32-37%		1699	422	23%	21-25%		1685	438	25%	22-27%	
Gender					**					**					^					^
Male	1703	563	34%	31-37%		1703	411	24%	22-27%		1710	467	26%	23-28%		1698	518	29%	27-32%	
Female	3201	1568	49%	47-51%		3100	1333	42%	40-44%		3112	765	24%	23-26%		3086	852	27%	26-29%	
Age					**					**					**					**
40-49 years	1434	547	38%	35-41%		1439	520	35%	32-38%		1435	252	18%	16-20%		1433	277	20%	18-23%	
50-64 years	1947	840	42%	39-45%		1922	749	35%	33-38%		1926	476	24%	22-27%		1915	542	29%	26-31%	
65 years and above	1523	744	48%	45-51%		1442	475	30%	28-33%		1461	504	37%	34-40%		1436	551	39%	37-42%	
Race					^					**					**					**
White	3701	1568	41%	39-43%		3622	1529	41%	39-43%		3634	894	24%	22-25%		3599	929	25%	23-26%	
African American	1028	493	45%	42-49%		1008	168	15%	13-18%		1015	290	29%	25-32%		1010	368	37%	33-41%	
Other	175	70	39%	31-49%		173	47	23%	16-31%		173	48	24%	17-32%		175	73	36%	28-45%	
Gender and Race					**					**					^					**
White male	1325	421	33%	30-36%		1331	376	30%	27-33%		1332	354	24%	22-27%		1324	363	25%	22-28%	
African American male	311	119	38%	32-45%		304	26	9%	6-13%		309	95	32%	26-38%		306	126	42%	35-48%	
Other male	67	23	30%	19-45%		68	9	9%	4-18%		69	18	21%	12-34%		68	29	32%	20-47%	
White female	2376	1147	48%	46-50%		2291	1153	51%	48-53%		2302	540	23%	21-26%		2275	566	24%	22-26%	
African American female	717	374	51%	47-55%		704	142	21%	17-25%		706	195	26%	23-30%		704	242	34%	30-38%	
Other female	108	47	47%	36-58%		105	38	35%	25-46%		104	30	26%	17-38%		107	44	40%	30-52%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value ≤ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 8-1 PEOPLE WHO REPORT THAT THEY USE METHODS TO PREVENT SUN EXPOSURE BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE AGE 40 YEARS AND OLDER

	People reporting they always or nearly always avoid the sun between the hours of 10 a.m. and 4 p.m. ~					People reporting they always or nearly always use sunscreen with a SPF rating of 15 or higher when outdoors for an hour or more on a sunny day ~					People reporting they always or nearly always wear a wide-brimmed hat or other hat that shades their face, ears, and neck when outdoors for an hour or more on a sunny day ~					People reporting they always or nearly always wear protective clothing like a long sleeved shirt or long pants when outdoors for an hour or more on a sunny day ~				
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**
Marital Status					**					**					**					**
Married or partner of unmarried couple	2875	1140	39%	37-41%		2859	1122	37%	34-39%		2863	730	25%	23-27%		2842	750	26%	25-28%	
Divorced or separated	812	360	44%	40-48%		789	278	32%	28-36%		794	170	22%	19-26%		790	221	28%	24-32%	
Widowed	759	408	53%	49-57%		701	221	28%	25-32%		705	218	32%	28-36%		701	258	38%	34-43%	
Never married	443	217	47%	41-53%		437	115	22%	17-27%		443	108	23%	18-23%		437	136	31%	26-37%	
Education					^					**					**					**
Less than high school	427	44	44%	39-50%		404	57	14%	10-18%		408	95	25%	20-31%		395	146	39%	33-45%	
High school grad or GED	1425	642	42%	39-46%		1371	418	27%	24-30%		1382	331	23%	21-26%		1377	377	28%	25-31%	
College 1-3 years	1101	475	42%	39-46%		1089	434	36%	33-39%		1088	245	23%	20-26%		1076	315	30%	26-33%	
College grad	1101	451	41%	37-44%		1091	456	39%	36-43%		1094	296	25%	22-28%		1092	284	24%	22-28%	
Advanced degree	824	352	41%	37-45%		821	374	43%	39-47%		823	256	30%	26-34%		818	235	26%	23-29%	
Employment Status					**					**					**					**
Employed for wages	2080	892	42%	39-44%		2078	799	36%	34-38%		2074	412	20%	18-23%		2065	491	24%	22-26%	
Self-employed	408	122	33%	27-39%		406	144	34%	28-40%		410	94	19%	15-24%		407	98	23%	19-29%	
Retired	1681	789	45%	43-48%		1607	559	32%	29-35%		1622	554	36%	34-39%		1597	599	38%	36-41%	
Other	713	319	41%	37-46%		691	235	30%	26-34%		693	163	21%	18-25%		693	175	25%	21-29%	
Household Income					^					**					^					**
<$25,000	856	416	47%	43-51%		803	186	20%	17-24%		810	200	25%	22-29%		797	279	35%	31-39%	
$25,000-<$35,000	434	193	42%	37-48%		426	136	28%	23-33%		423	125	30%	25-35%		426	141	32%	27-37%	
$35,000-<$50,000	625	288	43%	39-48%		615	201	29%	25-34%		616	159	26%	22-30%		611	185	31%	27-36%	
$50,000-<$75,000	760	309	41%	37-45%		767	301	35%	31-39%		765	187	23%	20-27%		760	198	26%	22-29%	
$75,000 or greater	1409	560	39%	37-43%		1397	619	41%	38-44%		1407	332	23%	20-26%		1402	330	23%	20-26%	
Don't know/not sure	271	134	47%	40-55%		258	71	27%	21-35%		259	65	24%	19-31%		253	85	37%	30-45%	
Refused	525	219	40%	35-45%		513	224	40%	35-45%		517	155	29%	24-34%		512	144	28%	24-34%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value ≤ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 8-2 PERSONS WHO REPORT THEY USE AT LEAST ONE METHOD TO PREVENT SUN EXPOSURE BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE AGE 40 YEARS AND OLDER

		Persons reporting they use at least one method to prevent sun exposure, all or nearly all the time			
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4995	3620	71%	69-72%	
Area of Residence					^
Urban	3329	2369	72%	70-73%	
Rural	1766	1251	69%	66-71%	
Gender					**
Male	1742	1156	66%	63-68%	
Female	3253	2464	75%	74-77%	
Age					**
40-49 years	1488	968	66%	63-69%	
50-64 years	1975	1430	71%	68-73%	
65 years and older	1572	1222	78%	75-80%	
Race					^
White	3772	2749	71%	70-73%	
African American	1044	748	71%	67-74%	
Other	179	123	64%	54-72%	
Gender and Race					**
White males	1358	895	65%	62-68%	
African American males	315	219	70%	63-75%	
Other males	69	42	53%	38-68%	
White females	2414	1854	77%	75-79%	
African American females	729	529	71%	67-75%	
Other females	110	81	72%	61-81%	
Marital Status					^
Married or partner of unmarried couple	2923	2109	71%	69-73%	
Divorced or separated	823	575	69%	65-72%	
Widowed	778	596	76%	72-79%	
Never married	454	326	70%	65-75%	
Education					^
Less than high school	439	312	70%	65-76%	
High school grad or GED	1452	1024	68%	65-71%	
College 1-3 years	1117	824	72%	69-75%	
College grad	1117	805	71%	68-74%	
Advanced degree	842	636	74%	70-77%	
Employment Status					**
Employed for wages	2109	1510	71%	69-74%	
Self-employed	413	256	59%	53-65%	
Retired	1726	1331	77%	74-79%	
Other	724	505	65%	61-70%	
Household Income					^
<$25,000	874	618	69%	65-73%	
$25,000-<$35,000	443	320	70%	65-75%	
$35,000-<$50,000	635	472	72%	68-76%	
$50,000-<$75,000	775	560	71%	67-75%	
$75,000 or greater	1424	1027	70%	67-73%	
Don't know/not sure	280	207	73%	66-79%	
Refused	539	398	72%	68-77%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

Chapter 9. Access to Health Care and Cancer Screening

Research has found that the people who are uninsured or underinsured are less likely to be screened for cancer.[1] In the MCS 2004, we sought to determine whether having health insurance was associated with higher levels of cancer screening.

The MCS 2004 found that 93% of Marylanders age 40 years and older reported they have some form of health insurance (Table 9-1). The prevalence among the urban and rural population and among men and women did not vary significantly. Those in the younger age group (age 40-49 years) were less likely to have insurance than those in the older age groups (50-64 years and 65 years and older) (88% vs. 93% and 99%, respectively). African Americans and people of other races were less likely to have health insurance compared to whites. Statistically significant differences in health insurance status were observed by marital status, education, employment status, and income. People who were never married or divorced or separated, had less than a high school education, were self-employed or had employment status of "other," or earned less than $25,000 per year were less likely to have health insurance. In addition to the 7% of Marylanders without health insurance, 5% of those who reported they currently had insurance reported that they had been without health insurance sometime during the past year (Table 9-2).

Having health insurance was significantly associated with cancer screening. For each screening test, (FOBT, lower GI endoscopy, PSA, mammogram, Pap smear, and oral exam), those with current health insurance had higher screening rates than those without (Table 9-3). The contrast between those with and without health insurance was greatest for those who ever had FOBT (56% vs. 28%), sigmoidoscopy or colonoscopy (65% vs. 25%), PSA test (80% vs. 33%), and oral cancer screening (45% vs. 22%).

People who currently have health insurance were asked if there was a time in the last 12 months when they did not have insurance. Only 5% answered yes to this question (Table 9-2). (Because survey responses in some cells are very small, these estimates may be unstable.) People 40 years and over who were without health insurance sometime in the last year were more likely to be those who never married or were divorced or separated, have an employment status of "other," or those earning less than $25,000 annually. Among those who were without health insurance for part of the past year, 39% had ever had screening with FOBT compared to 56% who had insurance coverage during the entire year (Table 9-3). This discrepancy exists among those who reported ever having lower GI endoscopy (53% vs. 66%), PSA test (66% vs. 81%), and oral cancer screening (31% vs. 45%). There was no significant difference for ever having had a mammogram or Pap smear.

People who do not currently have health insurance (7% of the population) were asked how long they have been without health insurance coverage. Thirty-three percent (33%) had lost their insurance in the last year, while 67% have been without insurance for one year or longer (data not shown). Those who had lost their insurance more recently (i.e., within the past year) had higher prevalence of screening compared to those who had been without health insurance for more than one year, for all tests except oral cancer screening. The results however were not

[1] 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.

statistically significant (Table 9-3). The highest prevalence of screening among those without health insurance was for mammograms and Pap tests.

People were asked how long it had been since they last visited a doctor for a routine checkup. Eighty-two percent (82%) had visited a doctor in the last year, 9% between 1 year and less than 2 years ago, 4% between 2 years and less than 5 years ago, and 5% had their last routine physical 5 or more years ago (data not shown in tables). Prevalence of ever having screening tests generally decreased with time since the last routine checkup (Tables 9-3).

While Table 9-3 examined whether people *ever* had various screening tests by health care access variables, Table 9-4 looks at the timeliness of cancer screening tests (e.g., are respondents up-to-date with screening) as recommended by the American Cancer Society or as listed in Healthy People 2010 objectives. Among the insured people, 37% had received an FOBT within the last 2 years, compared to 16% among those without health insurance. Higher timely screening rates among people with health insurance compared to those without health insurance were also seen with PSA testing (62% vs. 27%), DRE (60% vs. 29%), receiving a mammogram in the last 2 years (85% vs. 60%) and having a Pap smear in the past 3 years (91% vs. 75%), and oral cancer exam (36% vs. 12%) in the last year. Among those who currently have health insurance but had been without health insurance sometime in the last year, 27% reported they had performed an FOBT in the past 2 years compared to 38% of those who were insured throughout the year. Lower prevalence was also seen for having a PSA in the last year (41% among those who had been without insurance at sometime during the year compared to 63% for those insured throughout the year) and for oral cancer screening (24% vs. 36%). While differences were seen for DRE in the last year, mammogram in the last 2 years, and Pap smear in the last 3 years, none of these differences was statistically significant. A higher prevalence of up-to-date screening was seen among people who had visited a doctor in the last year for a routine check-up as compared to those who had visited the doctor 1 or more years before. As the length of time increased since the last check-up, the prevalence of timely screening decreased.

Increasing the proportion of people below age 65 who have health insurance is one of the goals of Healthy People 2010, from a national baseline of 83% (National Health Interview Survey, 1997) to 100%.[2] In the MCS 2004, 91% of people age 40-64 years reported they had health insurance. This was a decrease of 3% from the MCS 2002, where 94% of people in this age group reported having current health insurance (Chart 9-1).

2 Healthy People 2010, Goal to increase the number of people with health insurance. US Department of Health and Human Services, 2000. http://www.healthypeople.gov/document/HTML/Volume1/01Access.htm

TABLE 9-1 PEOPLE REPORTING TO HAVE HEALTH INSURANCE, 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**
Total Population	5000	4691	93%	92-94%		3233	3033	93%	91-94%		1767	1658	93%	91-94%	
Gender					^					^					^
Male	1744	1635	92%	90-94%		1114	1044	92%	89-94%		630	591	93%	90-95%	
Female	3256	3056	93%	92-94%		2119	1989	94%	92-95%		1137	1067	93%	91-95%	
Age					**					**					**
40-49 years	1447	1292	88%	86-90%		964	857	88%	86-91%		483	435	89%	85-92%	
50-64 years	1976	1844	93%	92-94%		1267	1188	93%	91-95%		709	656	93%	91-95%	
65 years and above	1577	1555	99%	98-99%		1002	988	99%	97-99%		575	567	99%	97-99%	
Race					**					**					**
White	3775	3616	95%	94-96%		2206	2125	95%	94-97%		1569	1491	94%	93-96%	
African American	1046	924	87%	84-90%		887	791	88%	85-90%		159	133	83%	75-90%	
Other	179	151	85%	77-90%		140	117	85%	77-91%		39	34	76%	48-92%	
Gender and Race					**					**					**
White male	1359	1294	94%	92-96%		793	756	94%	91-96%		566	538	95%	92-97%	
African American male	316	278	86%	80-90%		268	239	87%	81-91%		48	39	80%	63-90%	
Other male	69	63	87%	73-95%		53	49	89%	73-96%		16	14	58%	22-86%	
White female	2416	2322	96%	95-97%		1413	1369	97%	96-98%		1003	953	94%	92-96%	
African American female	730	646	88%	85-91%		619	552	88%	85-91%		111	94	87%	78-92%	
Other female	110	88	82%	73-89%		87	68	82%	72-89%		23	20	92%	73-98%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 9-1 PEOPLE REPORTING TO HAVE HEALTH INSURANCE, 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**
Marital Status					**					**					**
Married or partner of unmarried couple	2921	2812	95%	94-96%		1811	1746	95%	94-96%		1110	1066	95%	94-97%	
Divorced or separated	824	725	87%	83-89%		565	504	88%	85-91%		259	221	80%	72-86%	
Widowed	783	745	94%	92-96%		497	473	94%	92-96%		286	272	95%	90-97%	
Never married	455	393	82%	77-87%		348	299	82%	75-87%		107	94	87%	76-94%	
Education					**					**					**
Less than high school	442	386	83%	78-87%		249	212	83%	76-88%		193	174	85%	76-91%	
High school grad or GED	1455	1339	91%	89-93%		811	739	90%	87-93%		644	600	93%	90-95%	
College 1-3 years	1117	1043	92%	90-94%		722	676	92%	90-95%		395	367	93%	89-95%	
College grad	1118	1071	95%	92-96%		792	759	95%	92-96%		326	312	95%	92-97%	
Advanced degree	841	825	98%	96-99%		638	626	98%	96-99%		203	199	97%	92-99%	
Employment Status					**					**					**
Employed for wages	2109	2003	94%	93-96%		1422	1357	95%	93-96%		687	646	93%	91-96%	
Self-employed	414	365	88%	83-91%		259	233	89%	83-93%		155	132	83%	74-89%	
Retired	1728	1703	98%	97-99%		1069	1053	98%	97-99%		659	650	99%	97-100%	
Other	725	599	80%	75-83%		466	376	78%	73-83%		259	223	85%	79-89%	
Household Income					**					**					**
<$25,000	876	718	76%	72-80%		511	409	75%	69-80%		365	309	81%	75-86%	
$25,000-<$35,000	444	403	88%	84-92%		277	247	88%	82-92%		167	156	89%	80-95%	
$35,000-<$50,000	636	600	92%	89-95%		380	354	91%	86-94%		256	246	96%	92-98%	
$50,000-<$75,000	775	752	97%	94-98%		494	481	96%	93-98%		281	271	97%	94-98%	
$75,000 or greater	1423	1403	98%	97-99%		1009	999	99%	98-99%		414	404	97%	93-98%	
Don't know/not sure	280	268	94%	88-97%		185	176	93%	85-97%		95	92	97%	90-99%	
Refused	541	523	96%	92-98%		362	352	96%	92-98%		179	171	94%	87-97%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 9-2 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 ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4686	212	5%	4-6%	
Area of Residence					^
Urban	3029	138	5%	4-6%	
Rural	1657	74	5%	4-6%	
Gender					^
Male	1633	83	5%	4-7%	
Female	3053	129	4%	4-5%	
Age					^
40-49 years	1292	65	5%	4-6%	
50-64 years	1842	83	6%	4-7%	
65 years and above	1552	64	4%	3-5%	
Race					**
White	3613	137	4%	3-5%	
African American	923	61	6%	5-8%	
Other	150	14	10%	4-22%	
Gender and Race					**
White male	1293	61	5%	4-7%	
African American male	277	14	5%	3-9%	
Other male	63	8	13%	3-39%	
White female	2320	76	3%	2-4%	
African American female	646	47	7%	5-10%	
Other female	87	6	6%	3-14%	
Marital Status					**
Married or partner of unmarried couple	2810	105	4%	3-5%	
Divorced or separated	725	51	8%	6-11%	
Widowed	742	30	3%	2-5%	
Never married	393	26	9%	6-14%	
Education					**
Less than high school	386	29	8%	5-12%	
High school grad or GED	1335	64	5%	4-6%	
College 1-3 years	1043	51	6%	4-9%	
College grad	1070	37	4%	2-5%	
Advanced degree	825	29	3%	2-5%	
Employment Status					**
Employed for wages	2002	80	4%	3-6%	
Self-employed	365	23	6%	4-9%	
Retired	1700	65	4%	3-5%	
Other	598	43	9%	6-12%	
Household Income					**
<$25,000	716	59	10%	7-13%	
$25,000-<$35,000	403	27	7%	4-11%	
$35,000-<$50,000	600	29	6%	4-8%	
$50,000-<$75,000	751	23	4%	2-6%	
$75,000 or greater	1403	37	3%	2-5%	
Don't know/not sure	268	14	5%	3-9%	
Refused	521	22	4%	3-7%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 9-3 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**
Do you have health insurance?					**					**					**
Yes	3377	1891	56%	54-58%		3352	2176	65%	63-67%		1153	932	80%	77-83%	
No	153	51	28%	20-38%		152	43	25%	17-34%		59	22	33%	21-49%	
Was there a time you were without health insurance in the last 12 months?					**					**					**
Yes	145	64	39%	29-49%		144	83	53%	42-64%		53	34	66%	48-80%	
No	3227	1825	56%	54-58%		3203	2090	66%	64-68%		1098	898	81%	78-84%	
How long have you been without health insurance or coverage, among those who did not currently have health care coverage?					^					^					^
Less than a year	46	19	31%	17-48%		46	18	32%	18-49%		11	6	49%	19-81%	
One year or longer	101	31	28%	18-40%		101	23	18%	11-28%		45	14	24%	13-42%	
How long has it been since you last visited a doctor for a routine checkup?					**					**					**
Within the past year (less than one year)	3080	1756	57%	54-59%		3058	2012	66%	64-68%		1037	857	82%	79-85%	
Within at least one year but less than two	229	123	48%	41-56%		227	127	50%	42-58%		82	57	64%	50-75%	
Within at least two years but less than five	83	28	37%	26-49%		81	34	41%	30-54%		36	19	46%	29-64%	
Five years or more	114	28	22%	15-32%		113	31	24%	16-33%		54	17	26%	16-41%	

~ 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 of ≤ 0.05.
^ p-value > 0.05.

Maryland Cancer Survey, 2004

TABLE 9-3 PREVALENCE OF CANCER SCREENING AND ACCESS TO HEALTH CARE

	Ever had a mammogram ~~					Ever had a Pap smear #~					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	3054	2872	93%	92-94%		2033	2005	99%	98-99%		4465	2054	46%	43-47%	
No	199	160	82%	75-87%		148	142	95%	89-98%		296	75	22%	17-29%	
Was there a time you were without health insurance in the last 12 months?					^					^					**
Yes	129	120	95%	90-98%		79	78	99%	94-100%		201	62	31%	24-39%	
No	2922	2750	93%	92-94%		1952	1925	99%	98-99%		4259	1989	46%	44-47%	
How long have you been without health insurance or coverage, among those who did not currently have health care coverage?					^					^					^
Less than a year	71	58	85%	74-92%		49	49	100%			100	27	22%	14-32%	
One year or longer	121	98	83%	74-89%		93	89	94%	85-98%		187	48	24%	17-33%	
How long has it been since you last visited a doctor for a routine checkup?					**					**					**
Within the past year (less than one year)	2785	2642	94%	93-95%		1822	1797	99%	98-99%		3993	1822	44%	42-46%	
Within at least one year but less than two	245	220	88%	82-92%		189	184	98%	94-99%		381	158	41%	35-47%	
Within at least two years but less than five	92	77	84%	74-91%		70	69	98%	84-100%		156	73	45%	37-54%	
Five years or more	100	65	65%	54-75%		81	78	95%	85-99%		194	64	30%	23-39%	

~ Age $\geq$ 50 years
# Men $\geq$ 50 years and African American men 45-49 years
~~ Age $\geq$ 40 years
#~ Women $\geq$ 40 years with an intact uterus
** p-value of $\leq$ 0.05.
^ p-value > 0.05.

Maryland Cancer Survey, 2004

TABLE 9-4 PREVALENCE OF UP-TO-DATE CANCER SCREENING ACCORDING TO HEALTHY PEOPLE 2010 OBJECTIVES OR AMERICAN CANCER SOCEITY 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**
Do you have health insurance?					**					**					**
Yes	3377	1260	37%	35-39%		1153	737	62%	59-65%		1215	746	60%	57-63%	
No	153	26	16%	10-24%		59	12	27%	15-43%		60	15	29%	17-45%	
Was there a time you were without health insurance in the last 12 months?					**					**					^
Yes	145	46	27%	19-36%		53	26	41%	25-60%		59	31	47%	31-64%	
No	3227	1212	38%	36-40%		1098	711	63%	60-67%		1154	713	61%	58-64%	
How long have you been without health insurance or coverage, among those who did not currently have health care coverage?					^					^					^
Less than a year	46	11	17%	8-31%		11	3	43%	15-77%		12	5	46%	17-78%	
Greater than a year	101	14	15%	7-28%		45	7	18%	8-36%		45	7	18%	7-38%	
How long has it been since you last visited a doctor for a routine checkup?					**					**					**
Within the past year (less than one year)	3080	1206	39%	37-41%		1037	709	67%	63-70%		1088	721	65%	62-69%	
Within at least one year but less than two	229	58	24%	18-30%		82	24	26%	17-37%		87	25	24%	16-35%	
five	83	8	10%	5-19%		36	5	10%	4-24%		42	5	9%	3-20%	
Five years or more	114	10	11%	6-21%		54	7	15%	7-30%		54	6	11%	5-25%	

* 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

Maryland Cancer Survey, 2004

TABLE 9-4 PREVALENCE OF UP-TO-DATE CANCER SCREENING ACCORDING TO HEALTHY PEOPLE 2010 OBJECTIVES OR AMERICAN CANCER SOCEITY GUIDELINES AND ACCESS TO HEALTH CARE

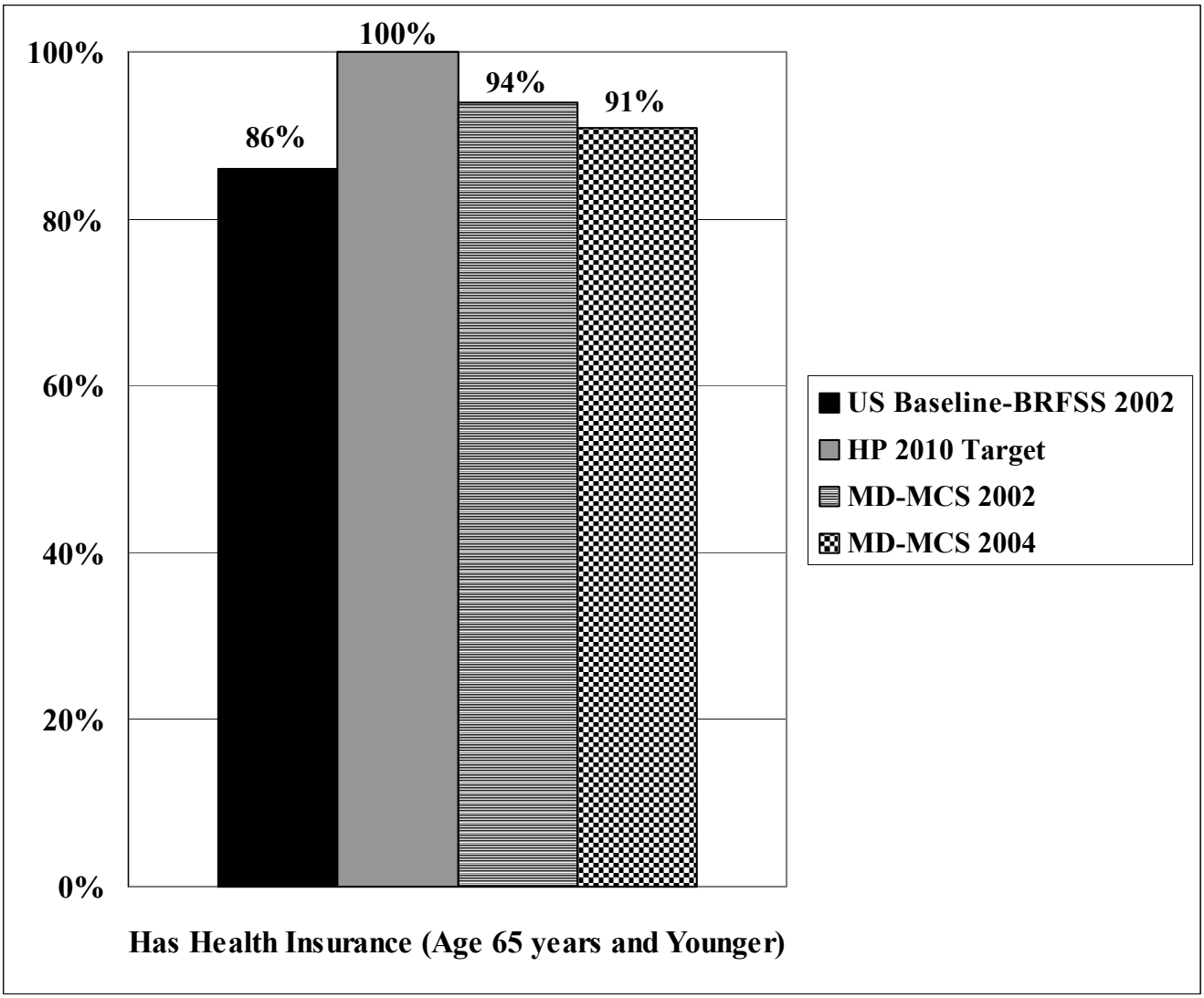
	*Had a mammogram in the last 2 years ~~					*Had a Pap smear within the past 3 years #~					*Had oral cancer screening in the past year ~~				
Selected characteristic	**N**	**n**	**wt%**	**95%CI**	**Stat Sig**	**N**	**n**	**wt%**	**95%CI**	**Stat Sig**	**N**	**n**	**wt%**	**95%CI**	**Stat Sig**
Do you have health insurance?					**					**					**
Yes	3054	2610	85%	83-86%		2033	1824	91%	89-92%		4465	1645	36%	34-37%	
No	199	112	60%	52-68%		148	111	75%	66-82%		296	43	12%	8-18%	
Was there a time you were without health insurance in the last 12 months?					^					^					**
Yes	129	106	81%	71-88%		79	70	87%	73-94%		201	51	24%	18-32%	
No	2922	2502	85%	84-87%		1952	1752	91%	89-92%		4259	1592	36%	34-38%	
How long have you been without health insurance or coverage, among those who did not currently have health care coverage?					**					**					^
Less than a year	71	49	74%	61-83%		49	46	95%	83-98%		100	20	17%	10-26%	
Greater than a year	121	61	55%	44-65%		93	63	69%	57-79%		187	23	11%	6-19%	
How long has it been since you last visited a doctor for a routine checkup?					**					**					**
Within the past year (less than one year)	2785	2446	88%	86-89%		1822	1670	92%	91-94%		3993	1464	35%	33-37%	
Within at least one year but less than two	245	177	71%	64-77%		189	163	86%	79-91%		381	123	32%	27-38%	
five	92	50	51%	39-62%		70	54	78%	65-87%		156	53	32%	25-41%	
Five years or more	100	32	36%	25-47%		81	34	47%	35-60%		194	41	19%	13-26%	

* 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

Maryland Cancer Survey, 2004

Chart 9-1 Proportion of adults under the age of 65 years that have health insurance; comparison of the results of the Maryland Cancer Survey, 2004 to a national baseline, Healthy People 2010 target values, and the Maryland Cancer Survey, 2002.



BRFSS-Behavioral Risk Factor Surveillance System Survey
HP 2010 Target-Healthy People 2010 Target
MD-MCS 2002-Maryland Cancer Survey, 2002
MD-MCS 2004-Maryland Cancer Survey, 2004

Chapter 10. 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.[1, 2] Cigarette smoking is causally related to cancer of the lung, mouth, larynx, esophagus, bladder, kidney, and pancreas.[1] Pipe and cigar smoking and smokeless tobacco have been implicated in the development of oral cancer. Smoking cessation has been shown to decrease the risk of developing smoking-related cancers compared to current smokers. High-risk alcohol consumption is also related to cancers of the liver, esophagus, oral cavity, and larynx.[2] Tobacco use and alcohol abuse are among the leading health indicators targeted by HP 2010. In the MCS 2004, Marylanders age 40 years and older were asked about their use of tobacco in cigarettes and other forms, as well as their alcohol consumption patterns.

10.1 Tobacco Use

The HP 2010 goal is to reduce the proportion of adult cigarette smokers age 18 years and older from the US 1998 baseline of 24% to a target of 12%.[3] Among Marylanders age 40 years and older, 17% report that they currently smoke, 33% have smoked in the past, and 50% have never smoked (Table 10-1). Significant differences were found between cigarette smoking status and all of the demographic characteristics. There were significantly more people who had never smoked cigarettes in urban areas than in rural areas of the state (51% compared to 47%), while the prevalence of current smoking was almost identical between the two regions of the state (17% vs. 18%). Women were more likely than men to have never smoked cigarettes (54% vs. 45%), but equally likely to be current smokers (16% vs. 18%). With increasing age, the percent of current smokers declines (ranging from 25% in 40-49 year olds to 16% among those 50-64 years to only 8% of those 65 years and above) and the percent of former smokers increases with age (ranging from 24% among those 40-49 years to 43% among those 65 years and older). African Americans were more likely to be current smokers than whites or people of other races (26% vs. 15% vs. 12%, respectively). When examining gender and race together, the highest levels of current smoking among those 40 years and older were found among African American males (28%) and African American females (23%). A higher proportion of persons who report being divorced or separated, or never married were more likely to be current smokers. As education level increased, the percent of those who currently smoke declined. Those with less than a high school education were almost six times as likely to be current smokers as those with advanced degrees (29% vs. 5%). Regarding employment status, the lowest level of current smokers was found among retirees (9%); this group was also most likely to have quit smoking (44%). In a pattern similar to that found for education level, as income level increased the percent of those who never smoked increased and the percent of current smokers fell.

Respondents were asked about ever using other types of tobacco, namely smokeless tobacco (e.g., chewing tobacco, snuff), cigars, and tobacco smoked through a water pipe (Table 10-2). Regarding smokeless tobacco, the HP 2010 objective is to reduce spit tobacco use from a

1 CDC Surgeon General's report on smoking- 2004--http://www.cdc.gov/tobacco/sgr/sgr_2004/index.htm
[2] CDC fact sheet on alcohol use- http://www.cdc.gov/alcohol/factsheets/general_information.htm
[3] Healthy People 2010 goals for cigarette smoking reduction, US Department of Health and Human Services, 2002 http://www.healthypeople.gov/document/HTML/Volume2/27Tobacco.htm#_Toc489766221

1998 baseline of 2.6 % to 0.4%.[3] Among Marylanders age 40 years and older, 9% report ever having used smokeless tobacco (Table 10-2) but only 0.7% report current use of these products (data not shown in tables). More men reported having tried smokeless tobacco products than women (16% vs. 3%). White men have tried these products significantly more often than other sex-race groups.

The HP 2010 objective regarding cigars is to reduce cigar use from a baseline of 2.5% to 1.2%.[3] Overall, 37% of Marylanders aged 40 years and older reported ever having smoked a cigar. Of the entire sample, approximately 4% are current cigar smokers (data not shown in tables). Men were almost four times more likely to have ever smoked a cigar than women (63% vs. 15%). Respondents at least 65 years of age were significantly less likely to have ever tried smoking cigars than were those ages 40-64 years. Currently employed persons reported ever smoking cigars more often than those not working. Ever smoking cigars significantly increased with household income level. When survey respondents were asked whether they have ever smoked tobacco through a water pipe or a "bong," approximately 4% reported that they had. Although the prevalence was low, those who had ever smoked tobacco through a water pipe were more likely to be male. Age was significantly inversely associated with ever smoking from a water pipe.

10.2 Smoking Cessation

There are a number of HP 2010 objectives that address smoking cessation. One objective is to increase the proportion of physicians who counsel their at-risk patients about tobacco use cessation from the 1988 baseline range of 43-50% to a target of 85%.[4] Among Marylanders age 40 years and older who currently smoke cigarettes, 69% reported having been told to stop smoking by a doctor, nurse, or other health care provider during the past 12 months (Table 10-3). Women were more likely than men to report receiving this advice (76% vs. 62%). Respondents at least 50 years old were more likely to be told to stop smoking. African American women (80%) were most likely to report they had been advised to stop smoking relative to other sex-race groups.

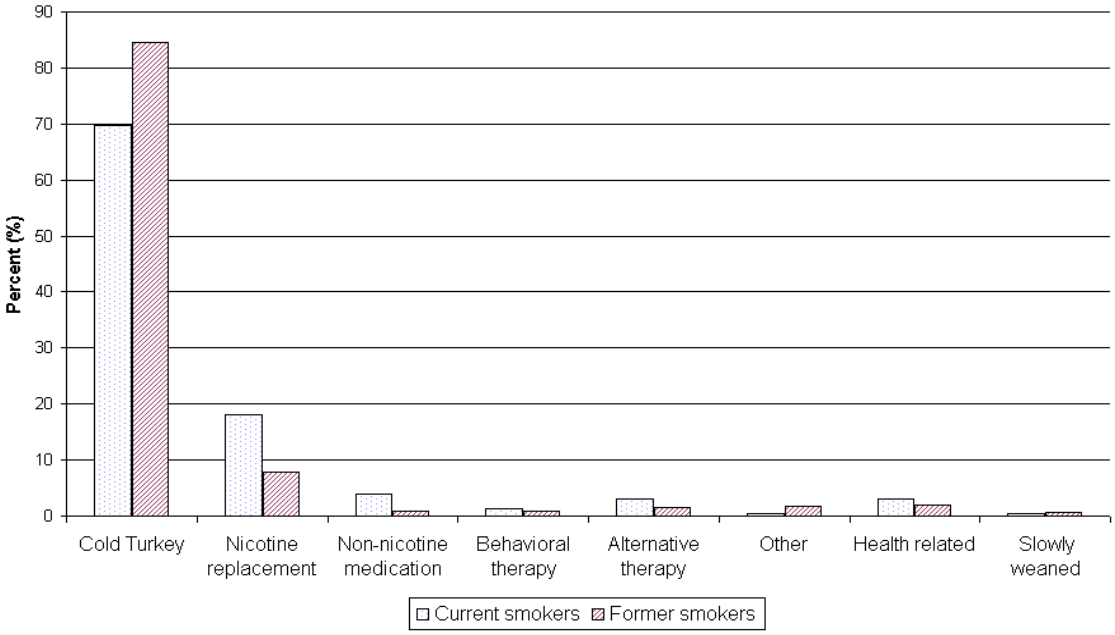
Another HP 2010 objective is to increase the smoking cessation attempts made by adult smokers; that is to increase the number adult smokers who stop smoking for one day or longer because they were trying to quit, from a baseline of 41% to a target of 75%. [3] Current smokers were asked whether they had stopped smoking at least one day during the previous 12 months because they were trying to quit smoking (Table 10-3). Fifty-nine percent (59%) of current smokers reported they had at least one smoking cessation attempt during the past year. African American smokers were most likely (68%) to attempt smoking cessation relative to other race groups. There was no statistically significant association between the likelihood of smoking cessation and marital status, education level, employment status, or household income.

Current and former smokers were asked about what cessation methods they used during their last attempt to stop smoking. Figure 10-1 shows the distribution of cessation methods used by current and former smokers during their last cessation attempt. It is notable that over 80% of

[4] Healthy People 2010 goals for cigarette cessation counseling, US Department of Health and Human Services, 2002 http://www.healthypeople.gov/document/HTML/Volume1/01Access.htm#_Toc489432815

the sampled former smokers used "cold turkey" as a successful cessation method. Quitting on one's own without help, or "going cold turkey," was the most often reported with 69% of current smokers using this method on their last cessation attempt (Table 10-3). African Americans were more likely to have tried "cold turkey" as a smoking cessation method on their last attempt at cessation during the past 12 months (80%). Widowed smokers were more likely to have tried "cold turkey" in their last attempt to stop smoking. Smokers without any college education were less likely to use "cold turkey" as their cessation method during the past 12 months.

FIGURE 10-1: CESSATION METHODS BY SMOKING STATUS, AMONG EVER-SMOKERS AGE 40 YEARS AND ABOVE



10.3 Smoking Status and Cancer Screening

Smoking status was examined in relation to the various types of cancer screening, as shown in Table 10-4. 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 colorectal cancer by fecal occult blood test or lower GI endoscopy. Male smokers, in the ages recommended for PSA testing, were less likely to have ever had a PSA test or a DRE. While female smokers at least 40 years old were least likely to have ever had a mammogram, no differences were found in the percent of women screened by clinical breast examination or Pap smear by smoking status. Regarding oral cancer, current smokers were less likely to have been screened for oral cancer than former and never smokers.

10.4 Alcohol Consumption

There were a series of survey questions about the frequency and amount of alcohol consumed during the past 30 days. Respondents were divided into three groups: non-drinkers, those at low-risk for alcohol-related problems, and those at high-risk (Table 10-5). Men are considered to be at high-risk for alcohol-related problems if they consume more than 14 drinks per week or more than 4 drinks on an occasion, while women are considered to be at high-risk if they consume more than 7 drinks per week or more than 3 drinks on an occasion.[5] Note that there are different criteria for men and women because women typically metabolize alcohol less efficiently than men.[6] An objective in HP 2010 is to reduce the proportion of adults, 18 years and older who engage in binge drinking in the past month from 16.6% to 6% nationally and to decrease the proportion of adults who exceed guidelines for low-risk drinking from a 1992 baseline of 72-74% for females and males, respectively, to a target of 50% for both sexes.[7]

Among Marylanders 40 years and older, 14% of respondents were classified as high-risk drinkers, 25% of respondents were low-risk drinkers; and the majority (61%) of respondents were classified as non-drinkers during the previous 30 days. During the previous 30 days, a higher proportion of men 40 years and older reported they consumed alcohol (49%) compared to women (31%). Approximately 20% of men and 9% 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 were more likely to be high-risk drinkers than were older respondents. White males were least likely to be non-drinkers, and along with African American males, were most likely to be high-risk drinkers. Widowed respondents were least likely to have consumed alcohol during the past 30 days. Those with a high school education or less or with low income were more likely to be non-drinkers. Low risk drinking increased with increasing education or increasing income. The percent of high-risk drinkers was fairly stable across education, income, and employment status.

Level of alcohol consumption was examined in relation to the various cancer screening tests. The most significant differences were seen for ever having had a colonoscopy and for oral cancer screening. For both tests, a higher proportion of low-risk drinkers reported having ever had the exam. It may be that low-risk drinking is a marker of higher socioeconomic status. No significant differences were seen among the other screening tests.

[5] NIAAA. The Physicians' Guide to Helping Patients With Alcohol Problems. NIH Pub. No. 95-3769. Rockville, MD: NIH, 1995.
[6] NIAAA. Alcohol and Women. *Alcohol Alert*. No. 10. Rockville, MD: NIH, 1990.
[7] Healthy People 2010 goals for alcohol consumption, US Department of Health and Human Services, 2002 http://www.healthypeople.gov/document/HTML/Volume2/26Substance.htm

TABLE 10-1 CIGARETTE SMOKING STATUS BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE AGE 40 YEARS AND OLDER

		Never Smoked ~			Previous Smoker ~			Current Smoker ~			
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4921	2431	50%	48-52%	1704	33%	31-34%	786	17%	16-19%	
Area of Residence											**
Urban	3183	1608	51%	49-53%	1072	32%	30-34%	503	17%	16-19%	
Rural	1738	823	47%	44-49%	632	36%	33-38%	283	18%	16-20%	
Gender											**
Male	1718	736	45%	42-48%	702	37%	34-39%	280	18%	16-21%	
Female	3203	1695	54%	52-56%	1002	29%	28-31%	506	16%	15-18%	
Age											**
40-49 years	1434	729	51%	48-54%	354	24%	21-26%	351	25%	22-28%	
50-64 years	1945	956	50%	47-52%	680	34%	32-37%	309	16%	14-18%	
65 years and above	1542	746	49%	46-51%	670	43%	41-46%	126	8%	7-10%	
Race											**
White	3725	1813	49%	47-51%	1387	36%	34-38%	525	15%	13-16%	
African American	1022	510	48%	45-52%	278	26%	23-30%	234	26%	22-29%	
Other	174	108	70%	61-78%	39	18%	12-25%	27	12%	8-19%	
Gender and Race											**
White male	1339	565	45%	42-48%	581	40%	37-43%	193	16%	13-18%	
African American male	311	132	42%	36-48%	101	30%	25-36%	78	28%	22-35%	
Other male	68	39	65%	50-77%	20	23%	13-36%	9	13%	6-26%	
White female	2386	1248	54%	51-56%	806	32%	30-35%	332	14%	13-16%	
African American female	711	378	53%	49-57%	177	23%	20-27%	156	23%	20-27%	
Other female	106	69	75%	65-83%	19	13%	8-22%	18	12%	7-20%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 10-1 CIGARETTE SMOKING STATUS BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE AGE 40 YEARS AND OLDER

		Never Smoked ~			Previous Smoker ~			Current Smoker ~			
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**Stat Sig**
Marital Status											**
Married or partner of unmarried couple	2885	1498	52%	50-54%	1007	34%	32-36%	380	14%	13-16%	
Divorced or separated	805	324	40%	36-44%	271	32%	28-36%	210	28%	25-32%	
Widowed	769	369	50%	46-54%	314	39%	35-43%	86	11%	9-14%	
Never married	447	235	50%	45-56%	106	21%	17-26%	106	29%	23-35%	
Education											**
Less than high school	432	175	40%	34-46%	155	31%	26-36%	102	29%	24-35%	
High school grad or GED	1432	650	43%	40-46%	468	31%	29-34%	314	26%	23-29%	
College 1-3 years	1103	503	45%	42-49%	398	35%	31-38%	202	20%	17-23%	
College grad	1106	592	57%	53-60%	396	34%	30-37%	118	10%	8-12%	
Advanced degree	832	504	63%	59-67%	280	32%	28-35%	48	5%	4-7%	
Employment Status											**
Employed for wages	2080	1100	54%	51-57%	605	28%	25-30%	375	18%	16-21%	
Self-employed	409	191	49%	43-55%	143	33%	27-38%	75	18%	14-23%	
Retired	1700	802	47%	44-50%	738	44%	41-46%	160	9%	8-11%	
Other	718	329	43%	39-48%	216	28%	24-32%	173	28%	24-33%	
Household Income											**
<$25,000	863	382	41%	37-45%	292	31%	27-35%	189	28%	24-33%	
$25,000-<$35,000	436	213	49%	44-55%	152	32%	27-37%	71	19%	15-24%	
$35,000-<$50,000	627	286	47%	42-51%	190	28%	24-32%	151	26%	22-30%	
$50,000-<$75,000	769	381	51%	47-55%	259	32%	28-36%	129	17%	14-21%	
$75,000 or greater	1414	754	56%	53-59%	508	34%	31-37%	152	10%	9-12%	
Don't know/not sure	279	139	44%	37-51%	107	39%	32-47%	33	17%	11-25%	
Refused	533	276	51%	46-56%	196	36%	31-41%	61	13%	9-18%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 10-2 EVER USE OF TOBACCO PRODUCTS OTHER THAN CIGARETTES BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE AGE 40 YEARS AND OLDER

	Persons who have ever used a smokeless tobacco product, such as chewing tobacco or snuff ~					Persons who have ever smoked a cigar, even one or two puffs ~					Persons who have ever smoked tobacco in a water pipe or bong, even one or two puffs ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4933	346	9%	8-10%		4923	1610	37%	36-39%		4930	164	4%	3-5%	
Area of Residence					**					**					^
Urban	3194	197	8%	7-10%		3189	1004	36%	34-38%		3192	115	4%	3-5%	
Rural	1739	149	10%	9-12%		1734	606	42%	39-45%		1738	49	4%	3-5%	
Gender					**					**					**
Male	1723	269	16%	14-18%		1718	1110	63%	60-66%		1721	108	7%	5-8%	
Female	3210	77	3%	2-3%		3205	500	15%	14-17%		3209	56	2%	1-3%	
Age					**					**					**
40-49 years	1434	119	11%	9-13%		1432	491	39%	36-42%		1431	61	5%	4-6%	
50-64 years	1950	118	7%	6-9%		1947	676	40%	37-43%		1951	67	4%	3-5%	
65 years and above	1549	109	8%	7-10%		1544	443	32%	29-34%		1548	36	3%	2-4%	
Race					**					**					^
White	3733	284	10%	8-11%		3724	1328	41%	39-43%		3731	136	5%	4-6%	
African American	1026	53	7%	5-9%		1025	240	29%	25-32%		1025	23	3%	2-4%	
Other	174	9	5%	2-10%		174	42	23%	16-31%		174	5	2%	1-6%	
Gender and Race					**					**					**
White male	1343	238	18%	16-21%		1339	920	68%	65-71%		1342	89	7%	6-9%	
African American male	312	25	10%	7-15%		311	161	52%	45-58%		311	15	5%	3-8%	
Other male	68	6	6%	2-17%		68	29	36%	24-51%		68	4	4%	1-12%	
White female	2390	46	2%	1-3%		2385	408	17%	15-19%		2389	47	2%	2-3%	
African American female	714	28	4%	3-6%		714	79	11%	8-13%		714	8	1%	1-3%	
Other female	106	3	3%	1-12%		106	13	10%	5-19%		106	1	1%	0-7%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 10-2 EVER USE OF TOBACCO PRODUCTS OTHER THAN CIGARETTES BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE AGE 40 YEARS AND OLDER

	Persons who have ever used a smokeless tobacco product, such as chewing tobacco or snuff ~					Persons who have ever smoked a cigar, even one or two puffs ~					Persons who have ever smoked tobacco in a water pipe or bong, even one or two puffs ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Marital Status					**					**					^
Married or partner of unmarried couple	2892	226	10%	9-11%		2885	1027	40%	38-42%		2891	106	4%	3-5%	
Divorced or separated	810	59	8%	6-11%		808	286	38%	34-42%		809	29	5%	3-8%	
Widowed	769	43	6%	4-9%		769	163	22%	19-26%		770	19	3%	2-5%	
Never married	447	18	4%	2-6%		446	129	32%	27-38%		445	10	2%	1-4%	
Education					^					^					^
Less than high school	431	45	12%	8-17%		430	130	34%	29-40%		431	12	3%	2-6%	
High school grad or GED	1439	107	9%	8-12%		1436	432	35%	32-38%		1438	30	3%	2-4%	
College 1-3 years	1105	71	8%	6-10%		1102	359	37%	33-40%		1103	40	4%	3-6%	
College grad	1108	65	7%	5-10%		1106	380	39%	35-42%		1108	35	4%	3-6%	
Advanced degree	834	57	9%	7-12%		833	304	42%	38-46%		834	47	6%	4-8%	
Employment Status					^					**					**
Employed for wages	2088	169	10%	8-12%		2082	730	40%	38-43%		2084	89	5%	4-6%	
Self-employed	408	29	11%	7-16%		408	170	45%	39-51%		409	21	5%	3-9%	
Retired	1705	117	8%	7-10%		1702	518	34%	32-37%		1705	37	3%	2-4%	
Other	718	30	6%	4-9%		717	187	29%	25-34%		718	17	3%	2-5%	
Household Income					^					**					^
<$25,000	863	57	9%	7-12%		861	208	28%	25-33%		861	16	3%	2-5%	
$25,000-<$35,000	438	21	5%	3-9%		437	122	31%	26-37%		438	15	5%	3-9%	
$35,000-<$50,000	629	42	8%	6-12%		628	221	39%	35-44%		628	16	3%	2-5%	
$50,000-<$75,000	771	65	10%	8-13%		769	275	38%	34-43%		771	32	5%	3-7%	
$75,000 or greater	1416	110	10%	8-12%		1413	560	44%	41-47%		1415	66	5%	4-6%	
Don't know/not sure	280	21	8%	5-13%		280	67	29%	22-37%		281	6	2%	1-6%	
Refused	536	30	6%	4-10%		535	157	34%	29-39%		536	13	3%	2-6%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 10-3 SMOKING CESSATION DURING THE PAST 12 MONTHS BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE 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 ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	784	556	69%	64-73%		785	447	59%	54-63%		447	306	69%	64-75%	
Area of Residence					^					^					^
Urban	501	361	70%	65-75%		502	283	59%	53-64%		283	202	71%	64-77%	
Rural	283	195	63%	56-70%		283	164	58%	51-64%		164	104	64%	55-72%	
Gender					**					^					^
Male	279	176	62%	54-68%		279	162	61%	54-67%		162	111	68%	58-76%	
Female	505	380	76%	71-80%		506	285	56%	51-61%		285	195	71%	65-77%	
Age					**					^					^
40-49 years	349	232	64%	57-70%		351	191	58%	52-64%		191	134	73%	64-80%	
50-64 years	309	232	76%	70-81%		309	183	60%	53-66%		183	118	64%	55-72%	
65 years and above	126	92	71%	61-80%		125	73	56%	46-66%		73	54	70%	56-81%	
Race					^					**					**
White	524	371	68%	63-73%		524	280	53%	48-58%		280	170	61%	54-68%	
African American	233	166	69%	61-76%		234	152	68%	60-75%		152	123	80%	71-87%	
Other	27	19	69%	43-87%		27	15	55%	32-77%		15	13	69%	30-92%	
Gender and Race					**					^					**
White male	192	125	63%	54-71%		192	102	55%	46-63%		102	65	63%	50-74%	
African American male	78	44	57%	44-70%		78	55	71%	57-81%		55	43	76%	59-87%	
Other male	9	7	75%	28-96%		9	5	62%	25-89%		5	3	44%	8-88%	
White female	332	246	74%	68-79%		332	178	51%	45-58%		178	105	60%	51-68%	
African American female	155	122	80%	72-86%		156	97	65%	56-73%		97	80	85%	76-91%	
Other female	18	12	64%	35-86%		18	10	49%	23-76%		10	10	100%	-	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 10-3 SMOKING CESSATION DURING THE PAST 12 MONTHS BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE 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 ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Marital Status					^					^					^
Married or partner of unmarried couple	380	276	70%	64-76%		379	220	61%	55-67%		220	141	66%	58-73%	
Divorced or separated	209	138	63%	55-70%		210	122	58%	50-65%		122	84	71%	61-79%	
Widowed	86	63	64%	51-76%		86	51	55%	42-66%		51	42	82%	66-92%	
Never married	105	77	73%	61-83%		106	51	52%	40-64%		51	38	77%	57-89%	
Education					^					^					^
Less than high school	102	63	60%	48-72%		102	63	65%	53-76%		63	45	60%	43-75%	
High school grad or GED	314	222	69%	62-76%		314	173	56%	48-63%		173	107	66%	57-75%	
College 1-3 years	201	148	71%	62-78%		202	122	62%	54-70%		122	86	75%	65-82%	
College grad	117	86	71%	60-80%		118	60	53%	42-64%		60	47	77%	58-89%	
Advanced degree	48	35	72%	54-84%		47	28	62%	44-77%		28	20	77%	57-89%	
Employment Status					^					^					^
Employed for wages	374	265	68%	62-74%		374	203	57%	50-63%		203	140	70%	62-78%	
Self-employed	75	44	57%	42-70%		75	48	70%	57-81%		48	35	76%	60-87%	
Retired	160	116	72%	63-79%		160	88	56%	47-64%		88	59	64%	51-75%	
Other	172	129	73%	63-81%		173	106	60%	50-69%		106	71	67%	55-78%	
Household Income					^					^					^
<$25,000	188	134	72%	64-80%		189	113	62%	53-71%		113	84	69%	55-80%	
$25,000-<$35,000	71	51	69%	55-81%		71	43	58%	45-71%		43	29	69%	51-82%	
$35,000-<$50,000	150	106	67%	57-76%		151	85	56%	46-65%		85	57	68%	56-78%	
$50,000-<$75,000	129	91	69%	58-78%		129	73	54%	43-64%		73	47	71%	58-81%	
$75,000 or greater	152	108	69%	59-77%		152	85	59%	49-68%		85	61	72%	58-82%	
Don't know/not sure	33	22	52%	30-73%		33	20	69%	47-84%		20	12	62%	33-84%	
Refused	61	44	71%	53-85%		60	28	55%	38-72%		28	16	73%	50-75%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 10-4 CANCER SCREENING PRACTICES BY SMOKING STATUS, AMONG THOSE 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 ≥ 50 years)	1689	946	55%	52-58%	1342	786	57%	54-61%	433	178	41%	36-47%	**
Persons reporting to have ever had a sigmoidoscopy or colonoscopy (lower GI endoscopy) (Age ≥ 50 years)	1679	1069	63%	60-66%	1331	909	69%	66-71%	429	198	45%	40-51%	**
Men reporting to have ever had a Prostate Specific Antigen test (Age ≥ 50 years & A-A men 45-49 years)	470	376	80%	76-84%	563	465	81%	76-84%	163	99	59%	50-68%	**
Men reporting to have ever had a digital rectal examination (Age > 50 years & A-A men 45-49 years)	493	435%	88%	84-91%	589	528	88%	85-91%	173	129	73%	64-80	**
Women reporting to have ever had a mammogram (Age ≥ 40 years)	1692	1593	93%	92-95%	1001	943	95%	93-96%	506	443	86%	81-89%	**
Women reporting to have ever had a clinical breast exam (Age ≥ 40 years)	1685	1600	95%	94-96%	995	960	97%	95-98%	504	481	95%	92-97%	^
Women reporting to have ever had a Pap smear (Age ≥ 40 years with an intact uterus)	1148	1126	98%	97-99%	663	656	99%	98-100%	337	334	99%	97-100%	^
Persons reporting to have ever had oral cancer screening (Age ≥ 40 years)	2312	1045	44%	42-46%	1627	796	48%	45-51%	747	258	33%	29-37%	**

** Statistically significant, p-value ≤ 0.05
^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 10-5 ALCOHOL CONSUMPTION DURING THE PAST 30 DAYS BY DEMOGRAPHIC FACTORS, AMONG PERSONS AGE 40 YEARS AND OLDER

		Non-drinkers			Low-risk drinkers *			High-risk drinkers~			
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4864	3078	61%	59-63%	1176	25%	24-27%	610	14%	13-15%	
Area of Residence											**
Urban	3141	1930	60%	58-62%	825	26%	24-28%	386	14%	12-15%	
Rural	1723	1148	64%	61-67%	351	21%	19-24%	224	15%	13-17%	
Gender											**
Male	1695	875	51%	48-54%	508	29%	27-32%	312	20%	18-22%	
Female	3169	2203	69%	67-71%	668	22%	20-23%	298	9%	8-10%	
Age											**
40-49 years	1417	816	57%	54-60%	356	25%	23-28%	245	18%	15-20%	
50-64 years	1922	1207	60%	57-63%	493	26%	24-29%	222	13%	12-16%	
65 years and above	1525	1055	68%	65-71%	327	22%	20-25%	143	10%	8-11%	
Race											**
White	3684	2201	56%	54-58%	994	29%	27-31%	489	15%	13-16%	
African American	1006	745	71%	67-74%	149	16%	13-18%	112	14%	11-17%	
Other	174	132	80%	72-86%	33	15%	10-22%	9	5%	2-12%	
Gender and Race											**
White male	1322	645	47%	44-51%	431	33%	30-36%	246	20%	17-22%	
African American male	305	182	58%	52-65%	59	18%	14-24%	64	23%	18-30%	
Other male	68	48	73%	59-84%	18	22%	13-35%	2	5%	1-18%	
White female	2362	1556	64%	62-66%	563	25%	23-27%	243	10%	9-12%	
African American female	701	563	81%	77-84%	90	13%	11-16%	48	6%	4-8%	
Other female	106	84	86%	77-92%	15	8%	4-16%	7	6%	2-14%	

* Men who drink 1-14 drinks/week or $\leq$ 4 drinks/occasion
Females who drink 1-7 drinks/week or $\leq$ 3 drinks/occasion.
~ High-risk drinking exceeds these criteria.
** P-value $\leq$ 0.05.
^ P-value > 0.05.

Maryland Cancer Survey, 2004

TABLE 10-5 ALCOHOL CONSUMPTION DURING THE PAST 30 DAYS BY DEMOGRAPHIC FACTORS, AMONG PERSONS AGE 40 YEARS AND OLDER

		Non-drinkers			Low-risk drinkers *			High-risk drinkers~			
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**Stat Sig**
Marital Status											**
Married or partner of unmarried couple	2850	1722	59%	57-61%	754	27%	25-29%	374	14%	13-16%	
Divorced or separated	802	498	61%	57-65%	185	23%	20-27%	119	16%	13-19%	
Widowed	758	556	74%	70-78%	142	18%	15-21%	60	8%	6-11%	
Never married	439	293	63%	56-68%	91	21%	16-26%	55	17%	12-23%	
Education											**
Less than high school	422	352	79%	74-84%	30	7%	5-11%	40	13%	9-19%	
High school grad or GED	1418	1038	70%	67-73%	207	15%	13-18%	173	15%	12-18%	
College 1-3 years	1091	697	63%	59-66%	246	22%	19-25%	148	15%	12-18%	
College grad	1095	598	54%	51-58%	352	32%	29-35%	145	14%	12-17%	
Advanced degree	822	381	45%	41-49%	338	43%	39-47%	103	13%	10-15%	
Employment Status											**
Employed for wages	2059	1176	55%	53-58%	574	28%	26-31%	309	16%	14-19%	
Self-employed	402	209	53%	47-59%	126	30%	25-36%	67	17%	13-22%	
Retired	1682	1157	67%	64-69%	354	22%	20-24%	171	11%	9-13%	
Other	707	524	72%	67-75%	122	18%	15-21%	61	11%	8-14%	
Household Income											**
<$25,000	855	686	77%	73-81%	100	11%	9-14%	69	11%	9-15%	
$25,000-<$35,000	431	323	73%	67-78%	65	15%	12-20%	43	12%	8-16%	
$35,000-<$50,000	613	403	65%	60-69%	125	20%	17-24%	85	15%	12-19%	
$50,000-<$75,000	759	449	60%	55-64%	180	22%	19-26%	130	18%	15-21%	
$75,000 or greater	1402	667	48%	45-51%	525	37%	34-40%	210	15%	13-17%	
Don't know/not sure	274	198	70%	62-76%	51	19%	14-26%	25	11%	7-18%	
Refused	530	352	64%	59-69%	130	25%	21-29%	48	11%	7-15%	

* Men who drink 1-14 drinks/week or $\leq$ 4 drinks/occasion
Females who drink 1-7 drinks/week or $\leq$ 3 drinks/occasion.
~ High-risk drinking exceeds these criteria.
** P-value $\leq$ 0.05.
^ P-value > 0.05.

Maryland Cancer Survey, 2004

TABLE 10-6 CANCER SCREENING PRACTICES BY RISK LEVEL OF ALCOHOL CONSUMPTION DURING THE PAST 30 DAYS, AMONG THOSE 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 (Age ≥ 50 years)	2251	1212	53%	50-55%	812	481	59%	55-63%	361	205	55%	49-61%	^
Persons reporting to have ever had a sigmoidoscopy or colonoscopy (Age ≥ 50 years)	2226	1357	60%	58-63%	813	565	70%	66-74%	361	237	65%	59-71%	**
Men reporting to have ever had a Prostate Specific Antigen test (Age ≥ 50 years & A-A men 45-49 years)	635	490	76%	72-80%	363	299	81%	76-85%	181	138	73%	65-80%	^
Men reporting to have ever had a digital rectal examination (Age ≥ 50 years & A-A men 45-49 years)	663	571	85%	81-88%	378	342	89%	85-92%	198	167	83%	76-89%	^
Women reporting to have ever had a mammogram (Age ≥ 40 years)	2200	2044	92%	91-94%	667	631	94%	91-96%	298	273	90%	85-94%	^
Women reporting to have ever had a clinical breast exam (Age ≥ 40 years)	2188	2068	95%	93-96%	665	654	98%	97-99%	297	287	96%	93-98%	**
Women reporting to have ever had a Pap smear (Age ≥ 40 years with an intact uterus)	1408	1383	98%	97-99%	516	511	99%	97-100%	205	204	99%	94-100%	^
Persons reporting to have ever had oral cancer screening (Age ≥ 40 years)	2943	1232	41%	39-43%	1109	591	51%	48-55%	578	258	42%	37-47%	**

* Men who drink 1-14 drinks/week or < 4 drinks/occasion
Females who drink 1-7 drinks/week or < 3 drinks/occasion.
~ High-risk drinking exceeds these criteria.
** p-value < 0.05.
^ p-value > 0.05.

Maryland Cancer Survey, 2004

Chapter 11. Weight, Dietary Practices, and Physical Activity

Maintaining a healthy weight, having good dietary habits, and increasing physical activity are among the leading health indicators used by HP 2010 to measure the health of the nation: weight, diet, and physical activity are major health concerns in the United States. One of the HP 2010 dietary goals is to increase the consumption of fruits and vegetables. Healthy People 2010 also set goals for increasing the proportion of people who are at a healthy weight and increasing the proportion of people who engage in moderate or vigorous physical activity.

11.1 Body Mass Index

Reducing the percentage of Americans who are overweight or obese is among the leading health indicators used by HP 2010. One HP 2010 objective is to reduce the proportion of American adults age 20 years and older who are obese (i.e., having a Body Mass Index (BMI) of 30.0 or greater) from a national baseline of 23% to 15%. Another HP 2010 objective is to increase the proportion of adults age 20 years and older that has a healthy weight (i.e., having a BMI of 18.5 to 24.9) from a national baseline of 42% to 60%.[1] Tabulations were generated in order to examine the distribution of BMI in Marylanders age 40 years and older.

Based on self-reported height and weight, 33% of Marylanders age 40 years and older had a BMI in the "healthy" range (BMI 18.5-24.9), 38% had a BMI in the "overweight" range (BMI 25.0-29.9), and 29% had a BMI in the "obese" range (BMI ≥ 30.0), as shown in Table 11-1. Fifty-nine persons with a BMI in the "underweight" range (BMI < 18.5) were excluded from analysis due to small sample size. Approximately 67% of Marylanders age 40 years and older can be considered as overweight or obese. Significant differences were found between BMI and several of the demographic characteristics. A lower proportion of men had a BMI in the healthy weight range than did women (27% vs. 38%, respectively). Men were more likely than women to be considered overweight (45% vs. 32%). Men and women were about equally likely to be obese (28% of men vs. 30% of women). People ages 40-49 years were most likely to have a healthy BMI (37%) relative to older respondents. The proportion of overweight plus obese individuals varied with age: 63% of the 40-49 year old group, 71% of those 50-64 years, and 68% in the 65 years and older age group.

African Americans had a greater percentage with a BMI in the obese range than did either whites or those of other races (39%, 26%, and 17%, respectively). African Americans also had a smaller percentage in the healthy BMI range compared to whites and those of other races (22%, 35%, and 53%, respectively). Fewer African Americans and fewer white males were in the healthy range for BMI when compared to white females and people of other races. African American females were most likely to have a BMI ≥ 30.0 (43%), while men of other races had the lowest reported levels of obesity (9%).

With regard to marital status, the highest percentage of obese and lowest percentage of healthy weight Marylanders were found among those who were divorced or separated. Education appears to be strongly associated with BMI in Marylanders age 40 years and above.

[1] Healthy People 2010 goals for healthy weight, US Department of Health and Human Services, 2002 http://www.healthypeople.gov/document/HTML/Volume2/19Nutrition.htm

Healthy weight was significantly associated with increased level of education. Healthy weight ranged from 20% among persons who did not complete high school to 41% of those possessing an advanced degree. Among those classified as obese, there was a strong inverse trend with education, ranging from 44% of persons who did not complete high school to 21% of those possessing an advanced degree. Adults who were neither employed nor retired (had an employment status of "other") were most likely to be considered obese. The proportion of persons classified as having a normal BMI increased with increasing income, while the proportion of those classified as obese decreased with increasing income level.

11.2 Dietary Practices

Two of the HP 2010 objectives concern the consumption of fruits and vegetables in the American population age 2 years and older. Specifically, it is recommended 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%. Similarly, there is a goal to increase the proportion of those who consume at least three daily servings of vegetables from 3% to 50%.[2] The benefits of these objectives are encompassed in the goal of the National Cancer Institute's National 5 A Day for Better Health Program, namely to increase the consumption of fruits and vegetables in the United States to 5 to 9 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.[3] Marylanders were questioned about their average daily consumption of a variety of fruits and vegetables. For the MCS 2004, we calculated daily intake of fruits and vegetables by summing the responses from questions about daily serving consumption of fruits, fruit juice, leafy salad greens, and vegetables (other than potatoes.) This is in contrast to the MCS 2002 where we asked people for the *total number* of servings of fruits and vegetables they ate daily on average. Because the method of data collection and analysis were different between 2002 and 2004, daily intake of fruit and vegetables cannot be directly compared between the two surveys.

Approximately 35% of Marylanders age 40 years and above reported eating five or more fruits and vegetables per day (Table 11-2). A significant difference for those reporting that they eat five or more servings of fruits and/or vegetables per day ("five-a-day") was found with respect to several demographic characteristics. More women reported eating five-a-day than did men (39% vs. 29%). White women had the highest percent eating 5 or more fruits and vegetables daily (41%), while white males and women of other races had the lowest (27% and 29%, respectively). Divorced, separated, and never married Marylanders were least likely to report eating at least five servings of fruits or vegetables daily. As education level increased, so did the percentage of individuals who said they ate five-a-day, ranging from 19% of those with less than high school education, to 41% of those possessing an advanced degree. A weaker positive association was seen for household income. Marylanders with a BMI in the healthy range were slightly more likely to consume at least five daily servings of fruits and/or vegetables

[2] Healthy People 2010 goals for fruits and vegetables, US Department of Health and Human Services, 2002 http://www.healthypeople.gov/document/HTML/Volume2/19Nutrition.htm#_Toc490383124

[3] National 5 A Day for Better Health Program, National Cancer Institute, National Institutes of Health. http://www.5aday.gov/

(39% vs. 33% for both overweight and obese). There was no significant association of the percentage of those who ate five-a-day with age, race, or employment status.

There exists much evidence to support the hypothesis that adequate levels of folic acid can reduce the incidence of neural tube defects in pregnant women. Recently, there has been limited scientific evidence to support that increased folic acid supplementation may have a preventive effect on the incidence of certain cancers, including breast, stomach, and colon.[4] Use of dietary supplements containing folic acid (in the form of either a multivitamin or a folic acid supplement) was assessed in Marylanders age 40 years and above (Table 11-2).

Overall, 57% of Marylanders age 40 years and older reported current use of a vitamin supplement containing folic acid. Women were more likely to report using these supplements than men (63% vs. 51%, respectively). The youngest group, age 40-49, was significantly less likely to use folic acid containing supplements. Whites were most likely to supplement their diet with folic acid; white women used these supplements in the highest proportion (66%). Never-married respondents were least likely to take these supplements and retired respondents had the highest levels of consumption relative to other employment status groups. There was a statistically significant positive trend of folic acid supplement use with education.

There is a HP 2010 objective to increase the proportion of persons age 2 years and older who consume less than 10 percent of calories from saturated fat.[5] One means of such a reduction includes reducing the amount of meat consumed daily. The MCS did not ask questions regarding the percent of calories from saturated fat; however the survey did ask about the intake of meat such as beef, pork, lamb, or veal. In the past few years, there have been some epidemiologic studies that suggest an association between high levels of meat consumption and increased risk of cancer of the colon,[6] stomach, rectum, and pancreas.[7] Respondents were asked about their average daily or weekly consumption of meat (such as beef, pork, lamb or veal, but excluding seafood and poultry) (Table 11-3). Overall, 25% of Marylanders age 40 years and older eat meat only once a week or less, 51% eat a serving of meat 2-6 times per week, and 24% report eating at least one serving of meat every day. On average, men consumed meat at higher levels than did women. Almost 60% of whites, both men and women, reported eating meat 2-6 times per week, while only 16% of white men reported eating meat once a week or less. Men of other races (49%) reported the highest prevalence of low meat consumption (0-1 time/week) followed by African American women (41%) and women of other races (35%). Married persons or those living with a partner were most likely to consume meat 2-6 times per week (55%). High levels of meat consumption ($\geq$1 servings daily) were inversely associated with years of education and with household income. When examining patterns by body weight, those considered to be obese (BMI $\geq$ 30.0) had the highest prevalence of daily meat consumption (30%), than the overweight (24%) or those with a healthy weight (21%). Those in the healthy weight range were more likely

[4] Bailey LB, Rampersaud GC, K auwell GP. Folic acid supplements and fortification affect the risk of neural tube defects, vascular disease and cancer: evolving science. J Nutr. 2003 Jun;133(6):1961S-1968S.
[5] Healthy People 2010 goal for red meat consumption , US Department of Health and Human Services, 2002 http://www.healthypeople.gov/document/HTML/Volume2/19Nutrition.htm# _Toc490383124
[6] Donaldson MS. Nutrition and cancer: a review of the evidence for an anti-cancer diet, Nutrition Journal, 2004 Oct 20;3:19.
[7] 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.

to report eating meat one or fewer times per week (28%) than those who are overweight (24%) or obese (19%).

11.3 Physical Activity

Physical activity is one of the leading health indicators used by HP 2010. Two HP 2010 goals are 1) to increase the proportion of adults 18 years and older who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day to a target of 30%, 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%.[8] Questions about the level of physical activity in the MCS 2004 were changed from those asked in 2002. For this reason, comparisons of results between the two years should not be made.

Twenty-six percent (26%) of Marylanders age 40 years and above reported they did vigorous physical activity at least three days per week for 20 minutes or more (Table 11-4). Significant differences were found between reported vigorous physical activity and all the demographic characteristics under consideration. More men than women reported doing vigorous activity at least three days per week (30% vs. 22%). The proportion of those engaging in vigorous physical activity decreased by almost half with increasing age, ranging from 31% of those age 40-49 years to 16% of those age 65 years and older. African American women reported the least amount of vigorous physical activity. There was a strong positive association between vigorous activity and education level. Retirees and those with employment status of "other" were less likely to participate in vigorous activity at least 3 days per week compared to people who are currently employed. The likelihood of engaging in regular vigorous activity increased significantly with increasing levels of household income.

When Maryland residents age 40 years and older were asked about how much moderate physical activity they engaged in for at least thirty minutes per day, 30% reported **not** doing at least 30 minutes of moderate physical activity at least one day a week, 8% reported doing 30 minutes or more of moderate physical activity 1-2 days per week, 25% reported doing 30 minutes or more of moderate physical activity 3-4 days per week, and 38% reported doing at least 30 minutes of moderate activity 5-7 days per week (Table 11-5). The latter estimate (for those Marylanders 40 years of age and older in our survey) exceeds the HP 2010 target of 30% for all adults 18 years and older. The overall amount of moderate activity performed did not differ significantly by gender. On average, respondents over the age of 64 years tended to do less moderate physical activity than those in younger age groups. More widowed people reported they did not engage in moderate activity for at least 30 minutes at least one day a week than people of other marital status. While there was no difference by educational level for engaging in moderate physical activity 5-7 times a week, the likelihood of engaging in moderate physical activity 3-4 times per week significantly increased with years of education. Conversely, the likelihood of being sedentary (not engaging in moderate activity at least once a week) decreased with education level. Respondents earning less than $25,000 annually were more likely to be sedentary and less likely to engage in moderate physical activity on 3-4 days per week than those earning $\geq$ $25,000 a year.

[8] Healthy People 2010 goals for physical activity, US Department of Health and Human Services, 2002 http://www.healthypeople.gov/document/HTML/Volume2/22Physical.htm#_Toc490380801

Responses to the physical activity questions were combined to achieve an overall picture of physical activity performed (Table 11-6). Fifty percent (50%) of Marylanders age 40 years and older engage in regular physical activity--either 20 minutes of vigorous physical activity at least three times a week or 30 minutes of moderate physical activity 5-7 days week. People living in rural areas, those between the ages of 40-49, and white and African American men were more likely to achieve these objectives. People who were widowed, had less than a high school education, or are retired were less likely to achieve these levels of physical activity.

When respondents who did not engage in 20 minutes vigorous activity for at least three days per week or at least 30 minutes of moderate physical activity five or more days per week were asked the reason *why* they were not physically active, 34% reported a physical disability or other health limitation, 30% reported a lack of motivation, and 26% reported a lack of time (data not shown in tables). 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.

11.4 Cancer Screening Practices by Physical Activity, Diet, and BMI

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 with five fruits and vegetables a day. 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 11-7).

The largest difference among the cancer screening tests when examining vigorous or moderate physical activity was seen in oral cancer. Among people who reported engaging in vigorous physical activity 3 or more days a week, 47% have had oral cancer screening compared to 42% without the behavior. Those who did not engage in moderate physical activity, even one day a week, were less likely to have ever had oral cancer screening.

Dietary factors were examined with regard to cancer screening. For fecal occult blood testing (FOBT), endoscopy, mammogram, PSA testing, digital rectal examination, and oral cancer screening, there was a direct relationship between the daily number servings of fruits and vegetables and the likelihood of ever having been screened. There was no difference in the percentage of women who ever had a mammogram, a clinical breast exam, or a Pap smear with respect to daily fruit and vegetable consumption. Folic acid dietary supplementation was associated with having all of the cancer screenings, except among women who have ever had a Pap smear. Regarding weekly red meat consumption, persons who consumed at least seven servings of meat per week were significantly less likely to have ever had an FOBT or an oral cancer screening.

Body mass index had no association with ever having been screened for the majority of the cancer screening modalities. Only oral cancer screening showed a significant difference in the percentage screened and BMI. The likelihood of being screened was lowest among obese

respondents with a BMI of at least 30.0 (40% vs. 46% for those with an overweight BMI and 44% for those with a healthy weight BMI.)

TABLE 11-1 BODY MASS INDEX BY DEMOGRAPHIC CHARACTERISTICS, AMONG PERSONS AGE 40 YEARS AND OLDER

		Healthy Weight (BMI 18.5 - 24.9)			Overweight (BMI 25.0 - 29.9)			Obese (BMI ≥ 30.0)			
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4710	1585	33%	31-35%	1790	38%	37-40%	1335	29%	27-31%	
Area of Residence											**
Urban	3047	1062	34%	32-36%	1131	38%	36-40%	854	29%	27-31%	
Rural	1663	523	29%	27-32%	659	40%	38-43%	481	30%	28-33%	
Gender											**
Male	1713	444	27%	24-30%	808	45%	42-48%	461	28%	26-31%	
Female	2997	1141	38%	36-40%	982	32%	30-34%	874	30%	28-32%	
Age											**
40-49 years	1379	523	37%	34-40%	470	35%	32-38%	386	28%	25-31%	
50-64 years	1846	565	29%	27-32%	717	39%	37-42%	564	32%	29-34%	
65 years and above	1485	497	32%	30-35%	603	41%	38-44%	385	27%	24-30%	
Race											**
White	3567	1306	35%	33-37%	1341	38%	37-40%	920	26%	25-28%	
African American	977	199	22%	19-26%	395	39%	35-43%	383	39%	35-43%	
Other	166	80	53%	43-62%	54	30%	22-39%	32	17%	11-26%	
Gender and Race											**
White male	1337	341	26%	23-29%	643	47%	43-50%	353	28%	25-31%	
African American male	309	70	24%	19-30%	141	42%	36-49%	98	34%	28-40%	
Other male	67	33	61%	46-74%	24	30%	19-45%	10	9%	4-20%	
White female	2230	965	44%	42-47%	698	31%	29-33%	567	25%	23-27%	
African American female	668	129	20%	17-24%	254	36%	32-41%	285	43%	39-48%	
Other female	99	47	45%	34-57%	30	29%	20-41%	22	25%	16-38%	

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

** Statistically significant, p-value ≤ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 11-1 BODY MASS INDEX BY DEMOGRAPHIC CHARACTERISTICS, AMONG PERSONS AGE 40 YEARS AND OLDER

		Healthy Weight (BMI 18.5 - 24.9)			Overweight (BMI 25.0 - 29.9)			Obese (BMI ≥ 30.0)			
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**Stat Sig**
Marital Status											**
Married or partner of unmarried couple	2762	959	34%	32-36%	1072	39%	37-41%	731	27%	25-29%	
Divorced or separated	781	226	27%	24-31%	228	37%	33-41%	267	36%	32-41%	
Widowed	733	262	34%	31-38%	269	37%	33-41%	202	29%	25-33%	
Never married	422	129	33%	27-39%	159	36%	31-42%	134	31%	26-37%	
Education											**
Less than high school	403	78	20%	15-25%	153	36%	30-42%	172	44%	38-50%	
High school grad or GED	1383	418	29%	26-32%	518	37%	34-40%	447	33%	30-37%	
College 1-3 years	1049	333	31%	27-34%	408	40%	37-44%	308	29%	26-33%	
College grad	1056	419	37%	34-41%	401	39%	35-42%	236	24%	21-27%	
Advanced degree	806	335	41%	37-45%	304	38%	34-42%	167	21%	18-25%	
Employment Status											**
Employed for wages	1994	673	33%	30-35%	751	39%	36-41%	570	28%	26-31%	
Self-employed	403	149	36%	30-42%	163	40%	34-46%	91	24%	19-30%	
Retired	1627	524	31%	28-33%	667	42%	39-44%	436	28%	25-30%	
Other	676	234	36%	31-40%	205	28%	24-32%	237	36%	32-41%	
Household Income											**
<$25,000	822	211	27%	23-32%	299	34%	30-38%	312	39%	35-43%	
$25,000-<$35,000	421	112	24%	20-29%	171	42%	36-48%	138	34%	29-40%	
$35,000-<$50,000	613	203	31%	27-35%	253	44%	39-49%	157	25%	21-29%	
$50,000-<$75,000	749	244	30%	27-34%	295	39%	35-43%	210	30%	27-35%	
$75,000 or greater	1374	523	37%	34-40%	515	38%	35-41%	336	25%	23-28%	
Don't know/not sure	250	91	34%	27-42%	97	37%	30-44%	62	29%	23-37%	
Refused	476	200	42%	37-48%	157	33%	28-39%	119	25%	20-29%	

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

** Statistically significant, p-value ≤ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 11-2 ADHERENCE TO DIETARY RECOMMENDATIONS AND FOLIC ACID SUPPLEMENT USAGE, AMONG THOSE AGED 40 YEARS AND OLDER

	Persons reporting they eat five or more fruits and vegetables per day ~#					Persons reporting they supplement their diet with folic acid ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4936	1757	35%	33-36%		4778	2866	57%	55-59%	
Area of Residence					^					^
Urban	3197	1149	35%	33-37%		3100	1876	58%	55-60%	
Rural	1739	608	34%	31-36%		1678	990	56%	53-59%	
Gender					**					**
Male	1722	481	29%	26-32%		1674	897	51%	48-54%	
Female	3214	1276	39%	37-41%		3104	1969	63%	61-65%	
Age					^					**
40-49 years	1434	489	34%	31-37%		1411	743	50%	47-53%	
50-64 years	1952	710	34%	32-37%		1906	1174	59%	56-62%	
65 years and above	1550	558	36%	34-39%		1461	949	65%	62-68%	
Race					^					**
White	3733	1330	34%	33-36%		3605	2245	60%	58-62%	
African American	1028	360	35%	32-39%		1000	526	50%	46-54%	
Other	175	67	33%	25-43%		173	95	53%	43-62%	
Gender and Race					**					**
White male	1343	358	27%	25-30%		1300	721	53%	50-57%	
African American male	311	96	32%	26-39%		307	138	41%	35-48%	
Other male	68	27	37%	23-54%		67	38	55%	39-70%	
White female	2390	972	41%	38-43%		2305	1524	66%	64-68%	
African American female	717	264	37%	33-42%		693	388	56%	52-61%	
Other female	107	40	29%	20-40%		106	57	51%	39-62%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05
# derived variable-see text for explanation

TABLE 11-2 ADHERENCE TO DIETARY RECOMMENDATIONS AND FOLIC ACID SUPPLEMENT USAGE, AMONG THOSE AGED 40 YEARS AND OLDER

	Persons reporting they eat five or more fruits and vegetables per day ~#					Persons reporting they supplement their diet with folic acid ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Marital Status					**					**
Married or partner of unmarried couple	2892	1080	36%	34-38%		2822	1701	58%	55-60%	
Divorced or separated	812	253	29%	25-33%		797	486	59%	54-63%	
Widowed	770	279	37%	33-41%		717	445	61%	56-65%	
Never married	447	140	30%	25-36%		427	226	49%	43-55%	
Education					**					**
Less than high school	430	91	19%	15-24%		408	176	41%	35-47%	
High school grad or GED	1438	436	32%	29-35%		1384	758	53%	50-56%	
College 1-3 years	1104	394	35%	32-39%		1080	694	60%	56-63%	
College grad	1113	453	37%	34-41%		1077	686	61%	57-64%	
Advanced degree	835	378	41%	38-45%		816	545	63%	59-67%	
Employment Status					^					**
Employed for wages	2090	718	33%	31-36%		2051	1171	53%	50-55%	
Self-employed	408	141	33%	28-39%		404	240	57%	51-63%	
Retired	1705	629	36%	34-39%		1620	1060	65%	62-67%	
Other	720	265	36%	32-41%		691	389	57%	53-62%	
Household Income					**					^
<$25,000	863	235	27%	23-31%		834	444	51%	47-55%	
$25,000-<$35,000	439	168	36%	31-41%		426	265	59%	53-64%	
$35,000-<$50,000	632	220	34%	30-39%		612	366	58%	54-63%	
$50,000-<$75,000	771	273	34%	30-38%		746	454	59%	54-63%	
$75,000 or greater	1418	558	37%	34-40%		1391	865	58%	55-61%	
Don't know/not sure	278	94	32%	26-39%		258	149	57%	49-64%	
Refused	535	209	38%	33-43%		511	323	58%	53-64%	
Body Mass Index					**					^
Healthy Weight (BMI 18.5-24.9)	1572	641	39%	36-42%		1527	984	60%	56-63%	
Overweight (BMI 25.0-29.9)	1777	614	33%	30-35%		1714	1021	57%	55-60%	
Obese (BMI $\geq$ 30.0)	1325	424	33%	30-36%		1288	728	54%	51-57%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

derived variable-see text for explanation

TABLE 11-3 FREQUENCY OF MEAT# CONSUMPTION BY DEMOGRAPHIC FACTORS, AMONG PERSONS AGE 40 YEARS AND OLDER

		Eats meat one or fewer times per week			Eats meat 2-6 times per week			Eats at least one serving of meat daily			
Selected Characteristic	**N**	**n**	**%**	**95% CI**	**n**	**%**	**95% CI**	**n**	**%**	**95% CI**	**Stat Sig**
Total Population	4990	1251	25%	23-26%	2550	51%	50-53%	1189	24%	23-26%	
Area of Residence											**
Urban	3222	913	27%	25-28%	1575	50%	48-52%	734	23%	22-25%	
Rural	1768	338	17%	15-19%	975	55%	53-58%	455	27%	25-30%	
Gender											**
Male	1738	319	20%	18-23%	952	53%	50-56%	467	27%	24-29%	
Female	3252	932	28%	27-30%	1598	50%	48-52%	722	22%	20-24%	
Age											^
40-49 years	1440	340	23%	21-26%	727	50%	47-53%	373	26%	24-29%	
50-64 years	1975	473	24%	22-26%	1059	53%	51-56%	443	23%	20-25%	
65 years and above	1575	438	27%	24-29%	764	50%	47-52%	373	24%	21-26%	
Race											**
White	3769	788	20%	18-21%	2098	57%	55-58%	883	24%	22-25%	
African American	1042	399	35%	32-39%	376	38%	34-42%	267	27%	24-30%	
Other	179	64	41%	32-51%	76	39%	30-48%	39	20%	14-28%	
Gender and Race											**
White male	1355	203	16%	14-19%	788	58%	54-61%	364	26%	24-29%	
African American male	314	89	28%	23-34%	134	42%	36-49%	91	30%	24-36%	
Other male	69	27	49%	34-64%	30	34%	22-48%	12	18%	9-32%	
White female	2414	585	23%	22-25%	1310	56%	53-58%	519	21%	19-23%	
African American female	728	310	41%	37-45%	242	35%	31-39%	176	25%	21-28%	
Other female	110	37	35%	25-46%	46	43%	32-54%	27	22%	15-32%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value $\leq$ 0.05
^ Not statistically significant, p-value > 0.05
# - Beef, pork, lamb, or veal

TABLE 11-3 FREQUENCY OF MEAT# CONSUMPTION BY DEMOGRAPHIC FACTORS, AMONG PERSONS AGE 40 YEARS AND OLDER

		Eats meat one or fewer times per week			Eats meat 2-6 times per week			Eats at least one serving of meat daily			
Selected Characteristic	**N**	**n**	**%**	**95% CI**	**n**	**%**	**95% CI**	**n**	**%**	**95% CI**	**Stat Sig**
Marital Status											**
Married or partner of unmarried couple	2918	605	22%	20-24%	1625	55%	52-57%	688	24%	22-25%	
Divorced or separated	820	257	31%	27-35%	368	45%	41-49%	195	24%	21-28%	
Widowed	781	254	33%	29-37%	337	41%	37-45%	190	26%	22-30%	
Never married	454	127	25%	20-30%	214	47%	41-53%	113	28%	23-34%	
Education											**
Less than high school	438	140	30%	25-35%	168	42%	36-48%	130	28%	23-33%	
High school grad or GED	1453	330	21%	19-24%	734	51%	47-54%	389	28%	25-31%	
College 1-3 years	1115	269	25%	22-28%	596	52%	48-55%	250	23%	20-26%	
College grad	1115	272	23%	20-26%	606	56%	52-59%	237	21%	19-25%	
Advanced degree	841	222	27%	24-31%	441	51%	47-55%	178	22%	19-25%	
Employment Status											^
Employed for wages	2105	504	24%	22-26%	1086	51%	48-54%	515	25%	23-27%	
Self-employed	412	95	25%	20-30%	224	53%	47-59%	93	22%	17-27%	
Retired	1727	445	25%	23-27%	884	52%	49-55%	398	23%	21-26%	
Other	722	195	25%	21-29%	347	50%	46-55%	180	25%	21-29%	
Household Income											**
<$25,000	874	253	29%	25-33%	385	43%	39-48%	236	28%	24-32%	
$25,000-<$35,000	440	99	22%	18-26%	215	49%	44-55%	126	29%	24-34%	
$35,000-<$50,000	634	151	23%	20-27%	322	50%	45-54%	161	27%	23-31%	
$50,000-<$75,000	774	177	22%	19-25%	415	54%	49-58%	182	25%	21-29%	
$75,000 or greater	1421	323	23%	20-26%	793	55%	52-58%	305	22%	19-24%	
Don't know/not sure	279	68	22%	17-29%	136	53%	45-60%	75	25%	19-31%	
Refused	543	155	30%	25-34%	284	51%	46-56%	104	20%	16-24%	
Body Mass Index											**
Healthy Weight (BMI 18.5-24.9)	1582	445	28%	25-31%	809	51%	48-54%	328	21%	19-24%	
Overweight (BMI 25.0-29.9)	1786	425	24%	22-27%	930	52%	49-55%	431	24%	21-26%	
Obese (BMI ≥ 30.0)	1329	270	19%	17-21%	690	52%	48-55%	369	30%	27-33%	

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

** Statistically significant, p-value ≤ 0.05

^ Not statistically significant, p-value > 0.05

- Beef, pork, lamb, or veal

TABLE 11-4 PARTICIPATION IN VIGOROUS PHYSICAL ACTIVITY 3 OR MORE DAYS PER WEEK BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE AGE 40 YEARS AND OLDER

	Engage in vigorous physical activity for 3 or more days per week for 20 or more minutes per occasion ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4907	1203	26%	24-27%	
Area of Residence					^
Urban	3177	762	25%	24-27%	
Rural	1730	441	27%	25-30%	
Gender					**
Male	1713	513	30%	28-33%	
Female	3194	690	22%	20-23%	
Age					**
40-49 years	1424	437	31%	28-34%	
50-64 years	1942	521	27%	25-30%	
65 years and above	1541	245	16%	14-18%	
Race					**
White	3711	937	27%	25-29%	
African American	1021	220	22%	19-25%	
Other	175	46	26%	19-35%	
Gender and Race					**
White male	1334	400	31%	28-35%	
African American male	311	87	27%	22-33%	
Other male	68	26	33%	21-47%	
White female	2377	537	23%	21-25%	
African American female	710	133	18%	15-22%	
Other female	107	20	20%	12-32%	
Marital Status					**
Married or partner of unmarried couple	2873	791	28%	26-30%	
Divorced or separated	806	194	25%	22-29%	
Widowed	766	113	15%	12-18%	
Never married	447	100	22%	18-27%	
Education					**
Less than high school	433	61	16%	12-21%	
High school grad or GED	1431	263	19%	17-22%	
College 1-3 years	1094	276	27%	24-31%	
College grad	1104	339	31%	28-34%	
Advanced degree	828	263	32%	29-36%	
Employment Status					**
Employed for wages	2075	585	29%	27-31%	
Self-employed	408	135	35%	29-41%	
Retired	1699	323	19%	17-22%	
Other	711	159	23%	20-27%	
Household Income					**
<$25,000	863	134	16%	13-19%	
$25,000-<$35,000	436	79	19%	15-25%	
$35,000-<$50,000	626	157	28%	24-32%	
$50,000-<$75,000	759	195	25%	21-28%	
$75,000 or greater	1412	468	33%	30-36%	
Don't know/not sure	278	41	17%	12-24%	
Refused	533	129	25%	21-30%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 11-5 LEVEL OF MODERATE PHYSICAL ACTIVITY BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE AGE 40 YEARS AND OLDER

		Do not engage in moderate physical activity for at least 30 minutes a day, at least 1 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 ~			
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4908	1465	30%	28-31%	372	8%	7-9%	1217	25%	23-26%	1854	38%	36-39%	
Area of Residence														**
Urban	3172	982	30%	29-32%	251	8%	7-9%	807	25%	23-27%	1132	36%	34-38%	
Rural	1736	483	27%	25-29%	121	7%	6-9%	410	23%	21-26%	722	43%	40-45%	
Gender														^
Male	1716	480	29%	26-31%	141	8%	7-10%	414	24%	22-27%	681	39%	36-42%	
Female	3192	985	31%	29-32%	231	8%	7-9%	803	25%	23-27%	1173	37%	35-39%	
Age														**
40-49 years	1430	373	27%	24-30%	114	8%	7-10%	386	27%	24-30%	557	38%	35-41%	
50-64 years	1942	542	28%	26-31%	145	8%	6-9%	519	26%	24-28%	736	38%	35-41%	
65 years and above	1536	550	35%	33-38%	113	8%	6-10%	312	20%	18-22%	561	37%	34-40%	
Race														^
White	3718	1077	29%	27-30%	275	8%	7-9%	929	25%	24-27%	1437	38%	37-40%	
African American	1017	340	32%	29-36%	86	8%	6-10%	249	24%	21-28%	342	36%	32-39%	
Other	173	48	35%	26-46%	11	6%	3-12%	39	20%	14-29%	75	38%	29-47%	
Gender and Race														^
White male	1341	363	27%	24-30%	116	9%	7-11%	323	25%	22-27%	539	39%	36-43%	
African American male	307	95	31%	25-37%	21	7%	4-11%	79	25%	20-31%	112	38%	32-44%	
Other male	68	22	45%	30-60%	4	6%	2-15%	12	17%	9-30%	30	33%	21-48%	
White female	2377	714	30%	28-32%	159	7%	6-8%	606	26%	24-28%	898	37%	35-40%	
African American female	710	245	33%	29-37%	65	9%	7-12%	170	24%	20-28%	230	34%	30-38%	
Other female	105	26	27%	18-39%	7	7%	3-16%	27	24%	15-35%	45	42%	31-54%	

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

** Statistically significant, p-value $\leq$ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 11-5 LEVEL OF MODERATE PHYSICAL ACTIVITY BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE AGE 40 YEARS AND OLDER

		Do not engage in moderate physical activity for at least 30 minutes a day, at least 1 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 ~			
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**Stat Sig**
Marital Status														**
Married or partner of unmarried couple	2877	759	27%	25-29%	224	8%	7-9%	766	26%	25-28%	1128	38%	36-40%	
Divorced or separated	808	243	30%	26-34%	73	10%	8-13%	200	23%	20-27%	292	37%	33-41%	
Widowed	761	307	40%	36-44%	45	7%	5-10%	145	18%	15-21%	264	35%	31-39%	
Never married	447	149	35%	29-41%	30	6%	4-10%	102	22%	17-27%	166	37%	32-43%	
Education														**
Less than high school	420	190	46%	40-51%	28	6%	4-10%	53	10%	8-14%	149	38%	32-44%	
High school grad or GED	1433	464	32%	29-35%	105	8%	6-10%	297	21%	18-23%	567	40%	37-43%	
College 1-3 years	1101	287	26%	23-29%	94	9%	7-12%	313	27%	24-30%	407	38%	35-42%	
College grad	1102	301	27%	24-31%	79	7%	5-9%	315	29%	26-33%	407	36%	33-40%	
Advanced degree	835	213	27%	23-30%	66	9%	7-11%	234	29%	25-33%	322	36%	32-40%	
Employment Status														**
Employed for wages	2081	556	28%	26-30%	179	9%	8-11%	577	27%	24-29%	769	37%	34-39%	
Self-employed	407	88	21%	17-26%	33	9%	6-13%	105	26%	21-32%	181	44%	38-50%	
Retired	1693	571	34%	31-36%	113	7%	6-9%	386	23%	21-26%	623	36%	34-39%	
Other	713	246	33%	29-37%	47	6%	4-8%	145	21%	18-25%	275	40%	36-45%	
Household Income														**
<$25,000	861	327	36%	32-40%	57	7%	5-9%	152	17%	14-21%	325	40%	36-44%	
$25,000-<$35,000	431	125	28%	23-33%	40	9%	7-13%	100	25%	20-30%	166	38%	33-44%	
$35,000-<$50,000	628	181	27%	23-31%	43	7%	5-9%	168	27%	23-32%	236	39%	35-44%	
$50,000-<$75,000	764	199	28%	24-32%	55	8%	6-10%	207	26%	22-29%	303	39%	35-44%	
$75,000 or greater	1413	342	26%	23-28%	121	9%	7-11%	413	29%	26-32%	537	37%	34-40%	
Don't know/not sure	277	113	42%	35-49%	15	6%	4-11%	48	15%	11-21%	101	37%	30-44%	
Refused	534	178	36%	31-41%	41	8%	5-11%	129	22%	19-27%	186	34%	30-39%	

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

** Statistically significant, p-value ≤ 0.05

^ Not statistically significant, p-value > 0.05

Maryland Cancer Survey, 2004

TABLE 11-6 PARTICIPATION IN EITHER VIGOROUS PHYSICAL ACTIVITY 3 OR MORE DAYS OR MODERATE ACTIVITY 5 TO 7 DAYS PER WEEK BY DEMOGRAPHIC CHARACTERISTICS, AMONG THOSE AGE 40 YEARS AND OLDER

	Engage in vigorous physical activity on ≥ 3 days per week for ≥ 20 minutes per occasion OR in moderate physical activity on 5-7 days per week for ≥ 30 minutes a day ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Population	4944	2430	50%	48-52%	
Area of Residence					**
Urban	3201	1529	49%	47-51%	
Rural	1743	901	54%	51-57%	
Gender					**
Male	1725	933	54%	51-57%	
Female	3219	1497	47%	45-49%	
Age					**
40-49 years	1435	764	53%	50-56%	
50-64 years	1955	982	51%	48-53%	
65 years and above	1554	684	45%	42-48%	
Race					^
White	3741	1871	51%	49-53%	
African American	1028	468	48%	44-51%	
Other	175	91	48%	39-57%	
Gender and Race					**
White male	1345	735	55%	52-58%	
African American male	312	159	52%	45-58%	
Other male	68	39	49%	34-64%	
White female	2396	1136	48%	45-50%	
African American female	716	309	45%	40-49%	
Other female	107	52	48%	37-59%	
Marital Status					**
Married or partner of unmarried couple	2896	1499	52%	50-54%	
Divorced or separated	813	389	50%	45-54%	
Widowed	771	323	42%	38-47%	
Never married	449	212	47%	41-53%	
Education					**
Less than high school	433	176	44%	39-50%	
High school grad or GED	1441	671	47%	44-50%	
College 1-3 years	1105	558	53%	49-57%	
College grad	1112	573	51%	48-55%	
Advanced degree	836	450	53%	49-57%	
Employment Status					**
Employed for wages	2091	1062	51%	49-54%	
Self-employed	408	236	58%	52-64%	
Retired	1711	778	46%	43-49%	
Other	720	348	51%	46-55%	
Household Income					**
<$25,000	867	382	46%	42-51%	
$25,000-<$35,000	439	202	47%	41-52%	
$35,000-<$50,000	633	318	53%	49-58%	
$50,000-<$75,000	768	393	51%	46-55%	
$75,000 or greater	1418	768	53%	50-57%	
Don't know/not sure	281	119	43%	36-51%	
Refused	538	248	47%	42-52%	

~ Some data missing for marital status, education, and employment status
** Statistically significant, p-value ≤ 0.05
^ Not statistically significant, p-value > 0.05

TABLE 11-7 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 Prostatic 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**
Do you engage in vigorous physical activity for 3 or more days per week for 20 or more minutes per occasion?					^					^					^					^
Yes	764	436	52%	48-56%		763	494	64%	60-68%		319	257	78%	72-83%		331	286	84%	79-89%	
No	2697	1475	55%	53-57%		2672	1684	63%	61-65%		820	648	79%	75-82%		869	767	88%	85-90%	
In a typical week, how many days do you engage in moderate physical activity for at least 30 minutes a day?					^					^					^					^
0 days/week	1086	582	54%	50-57%		1073	666	62%	58-65%		326	252	78%	72-82%		347	298	87%	82-90%	
1-2 days/week	258	148	57%	50-64%		257	170	66%	59-73%		85	70	81%	68-89%		90	84	91%	79-96%	
3-4 days/week	826	472	56%	52-60%		822	538	66%	62-70%		269	222	81%	75-86%		280	253	90%	85-93%	
5-7 days/week	1285	706	53%	50-57%		1279	799	62%	59-65%		460	359	77%	72-81%		484	420	84%	80-88%	
How many total servings of fruits and vegetables do you eat each day?					**					**					**					**
0-2 fruits/vegetables per day	977	479	48%	45-52%		970	568	58%	54-62%		391	284	70%	64-75%		417	351	81%	76-85%	
3-4 fruits/vegetables per day	1238	687	55%	52-58%		1232	802	65%	61-68%		445	363	82%	77-86%		473	425	90%	86-93%	
5+ fruits/vegetables per day	1264	757	59%	56-62%		1252	822	66%	63-69%		314	266	84%	78-88%		320	286	89%	85-93%	
Do you supplement your diet with folic acid?					**					**					**					**
Yes	2113	1256	60%	57-62%		2102	1422	68%	66-70%		643	550	85%	81-88%		671	609	90%	87-92%	
No	1233	593	46%	43-50%		1220	669	54%	51-57%		470	335	71%	66-76%		499	416	83%	78-86%	
How many servings of red meat do you eat each week?					**					^					^					^
0-1 servings per week	904	504	54%	50-58%		894	568	62%	58-66%		219	174	80%	73-85%		226	194	87%	81-91%	
2-6 servings per week	1814	1028	57%	54-59%		1801	1163	65%	62-68%		658	527	78%	74-82%		693	612	87%	83-89%	
7+ servings per week	810	411	49%	45-53%		806	483	60%	55-64%		283	219	78%	72-83%		303	263	86%	81-90%	
Body Mass Index					^					^					^					^
Healthy weight (BMI 18.5 - 24.9)	1052	589	55%	52-59%		1049	695	67%	63-70%		288	236	81%	75-86%		307	259	82%	76-87%	
Overweight (BMI 25.0 - 29.9)	1314	746	56%	53-59%		1300	832	64%	61-67%		559	443	78%	74-82%		580	513	88%	85-91%	
Obese (BMI ≥ 30.0)	944	505	53%	49-57%		936	574	61%	57-65%		293	228	78%	72-83%		314	283	89%	84-92%	

~ 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 of ≤ 0.05.
^ p-value > 0.05.

TABLE 11-7 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 clinical breast exam ~~					Women reporting to have ever had a Pap smear #~					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**	**N**	**n**	**wt%**	**95%CI**	**Stat Sig**
Do you engage in vigorous physical activity for 3 or more days per week for 20 or more minutes per occasion?					**					**					**					**
Yes	688	629	90%	87-92%		688	668	97%	96-98%		502	499	99%	98-100%		1147	572	47%	43-50%	
No	2502	2344	93%	92-94%		2487	2363	95%	94-96%		1636	1607	98%	97-99%		3525	1516	42%	40-44%	
In a typical week, how many days do you engage in moderate physical activity for at least 30 minutes a day?					**					**					**					**
0 days/week	985	920	93%	91-95%		979	915	94%	92-95%		632	616	98%	97-99%		1390	519	37%	34-40%	
1-2 days/week	231	217	94%	89-97%		231	226	97%	91-99%		156	152	96%	88-98%		352	156	47%	40-53%	
3-4 days/week	802	763	95%	93-97%		801	769	97%	95-98%		545	541	99%	97-100%		1154	598	50%	47-53%	
5-7 days/week	1170	1070	90%	87-92%		1162	1124	97%	95-97%		808	802	99%	98-100%		1777	822	44%	41-46%	
How many total servings of fruits and vegetables do you eat each day?					^					^					^					**
0-2 fruits/vegetables per day	850	778	91%	88-93%		844	802	95%	93-96%		570	559	98%	97-99%		1371	500	36%	33-39%	
3-4 fruits/vegetables per day	1086	1015	93%	91-94%		1081	1032	96%	94-97%		720	708	98%	96-99%		1640	759	45%	43-48%	
5+ fruits/vegetables per day	1275	1198	93%	91-95%		1271	1220	96%	94-97%		867	858	99%	98-100%		1690	848	48%	45-50%	
Do you supplement your diet with folic acid?					**					**					^					**
Yes	1968	1861	94%	93-95%		1959	1890	97%	96-98%		1329	1313	98%	97-99%		2740	1349	48%	46-50%	
No	1133	1025	90%	88-92%		1129	1058	94%	92-95%		759	746	99%	98-99%		1816	698	37%	35-40%	
How many servings of red meat do you eat each week?					^					^					^					**
0-1 servings per week	931	866	92%	90-94%		926	875	95%	93-96%		601	586	98%	96-99%		1202	525	42%	38-45%	
2-6 servings per week	1598	1502	94%	92-95%		1591	1528	96%	95-97%		1108	1097	99%	98-99%		2423	1149	46%	44-49%	
7+ servings per week	719	662	91%	88-93%		716	685	96%	94-97%		471	463	98%	96-99%		1126	449	38%	35-42%	
Body Mass Index					^					^					^					**
Healthy weight (BMI 18.5 - 24.9)	1141	1066	93%	91-94%		1133	1091	97%	95-98%		810	802	99%	98-100%		1509	737	44%	41-47%	
Overweight (BMI 25.0 - 29.9)	981	930	94%	92-96%		981	935	96%	94-97%		658	649	98%	97-99%		1697	774	46%	43-49%	
Obese (BMI ≥ 30.0)	874	803	92%	89-93%		870	829	95%	93-97%		533	524	98%	97-99%		1280	520	40%	37-43%	

~ 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 of ≤ 0.05.
^ p-value > 0.05.

Chapter 12. Summary of the MCS 2004 and Comparison between MCS 2004 and MCS 2002

12.1 Summary of MCS 2004

Maryland adults continue to compare favorably to national baseline levels for several types of cancer screening. According to data from the MCS, 2004, Maryland exceeded the national prevalences reported in HP 2010 for colorectal cancer (CRC) screening with lower GI endoscopy (sigmoidoscopy and colonoscopy), having had a mammogram in the last two years, Pap testing in the last three years, and oral cancer screening in the last year. Marylanders fell below the Healthy People 2010 target for having an FOBT within the last two years (36% among those age 50 years and older compared to the Healthy People target of 50%), and this was significantly lower than the 44%, which was reported in the MCS, 2002. This may be explained by the high percentage of people, age 50 years and older, reporting to have ever had lower GI endoscopic exams (63% in 2004 compared to 58% in 2002). The United States Preventive Services Task Force has not recommended prostate cancer screening, and PSA and DRE recommendations are not part of the HP 2010 objectives.[1] The national baseline screening rates from the 2002 BRFSS, published by the American Cancer Society,[2] showed that 54% of men, age 50 years and older, have had a PSA test and 52% have had a DRE, within the past year. This compares to 60% for the PSA and 58% for DRE among Maryland men within the last year in the MCS, 2004 (Maryland figures include African American men, age 45-49 years.)

As was noted in 2002, results from the MCS 2004 saw differences in prevalence of screening by gender, race, and age for the various screening tests. Differences were noted between men and women for colorectal and oral cancer screening. A higher percentage of men had endoscopic examinations, whereas women were more likely to have ever performed home FOBT testing and undergone recent oral cancer screening. 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 recent PSA testing. Mammography screening within the last two years increased with age, until women reach 75 years, when it decreased. Women in the younger age groups (40-49 years and 50-64 years) reported a higher prevalence of ever having a clinical breast exam (CBE), as well as having had a Pap smear in the last three years. Generally, there were no differences by race for mammography and Pap smear. Women of other races were less likely to have ever had a CBE. Men of other races were less likely to have discussed prostate screening with their health care providers than either whites or African Americans. Fecal occult blood testing was also performed less often in people of other races. Lower GI endoscopy screening was reported less often in African Americans and people of other race. African Americans and people of other races also reported much less oral cancer screening than whites.

Generally, cancer screening increased wit higher educational levels and higher annual incomes. People that reported employment status of "other" generally had lower rates of mammography, CBE, PSA, and DRE screening. People who had health insurance reported

[1] US Preventive Services Task Force, Screening for Prostate Cancer, http://www.ahcpr.gov/clinic/uspstf/uspsprca.htm

[2] Cancer Prevention and Early Detection, Facts and Figures, American Cancer Society, http://www.cancer.org/downloads/STT/CPED2004PWSecured.pdf

higher rates of screening for all tests. Those who reported being without health insurance sometime within the past year had lower screening rates for ever having had colorectal, prostate, or oral cancer screening. When recent testing was examined, those who had been without health insurance sometime in the past year had lower prevalence for FOBT within the last two years and PSA testing and oral screening within the last year. Screening was generally higher among people who have had a physical exam within the last two years.

Clearly, 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 test, the rates for colorectal and breast cancer screening were much higher than when no recommendation was made. When asked why a screening test was not done, the fact that the doctor did not order the test was often a prominent reason.

Marylanders have been less successful in reaching the HP 2010 objectives for some behavioral and lifestyle goals. When asked the question, "how many fruits and vegetables do you eat per day," only 35% of those 40 years and older answered five or more. This falls below the Healthy People 2010 goals of increasing fruit consumption to at least two servings per day in 75% of the population (age 2 years and over) and vegetable consumption of at least three servings per day in 50%. The MCS 2004 found that 17% of Marylanders 40 years and older currently smoke cigarettes, which did not meet the HP 2010 target for adults of 12%. With respect to the physical activity objectives highlighted in HP 2010, Marylanders 40 years and older have surpassed the target for all adults of 30% for moderate activity 5-7 days a week (38%), but are below the 30% target for vigorous physical activity 3 days a week (26%).

In summary, Marylanders are knowledgeable about cancer screening tests and are being tested at rates comparable to, or better than, the national baselines. As in 2002, our data suggest screening rates for some tests differ by gender and/or race, and other demographics, such as age, education, employment status, and income. Other factors also have an influence on screening, such as health insurance status, whether or not people have had a physical examination in the last two years, and whether or not the health care provider recommends the test be done.

12.2 Comparison between MCS 2002 and MCS 2004

Table 12-1 displays comparisons between the results of the 2002 MCS and the survey performed in 2004. (For comparisons in this report and in Table 12-1 we analyzed prostate screening questions in MCS 2002 and 2004 for all men 50 years and older and for African American men age 45-49. We have not made comparisons between dietary and physical activity measures because the questions were not identical in the two surveys.) A 3% increase in the awareness and knowledge about colonoscopy/sigmoidoscopy was seen along with a 5% increase in the proportion of Marylanders' who have ever had a lower GI endoscopy. An 8% reduction in the percentage of people age 50 years and older who reported they had done a home FOBT in the last two years was observed in 2004 as compared to 2002. When looking at up-to-date CRC testing by the three screening modalities (FOBT, sigmoidoscopy, and colonoscopy), the proportion of people never tested dropped from 26% in 2002 to 23% in 2004. While the prevalence of up-to-date testing with only an FOBT, remained stable, sigmoidoscopy testing has decreased and the prevalence of colonoscopy increased from 41% in 2002 to 50% in 2004. Men reporting to have ever had a PSA test increased from 73% in 2002 to 77% in 2004.

Breast and cervical cancer screenings have already achieved HP 2010 objectives and do not show significant differences between the two survey results. Oral cancer screening rates are essentially unchanged from 2002 and continue to be above the HP 2010 objective. While there was little difference in the percentage of people who report the use sun screen or wear wide-brimmed hats when in the sun, the percentage of people who avoid the sun between 10 am and 4 pm increased from 37% in 2002 to 42% in 2004.

The health care access parameters did not show a significant difference compared to the results in 2002. The proportion of obese individuals rose to 29% in 2004 from 25% in 2002 and the percentage of normal weight individuals fell from 36% in 2002 to 33% in 2004. The prevalence of current cigarette smokers failed to show any significant decrease.

TABLE 12-1 COMPARISON OF POPULATION SCREENING AND RISK BEHAVIOR CHARACTERISTICS MEASURED IN THE MCS 2002 AND THE MCS 2004 TO UNITED STATES BASELINE MEASUREMENTS AND HEALTHY PEOPLE 2010 OBJECTIVES

	MCS 2002		MCS 2004		US Baseline	HP 2010 Target
Selected Population Screening Characteristic	**wt %**	**95% CI**	**wt %**	**95% CI**	**%**	**%**
Colorectal Cancer Screening						
Heard of sigmoidoscopy/ colonoscopy (≥ 40 years)	88%	87-89%	91%	90-92%		
Awareness of no-cost colon screening at local health department (≥ 40 years)	27%	26-29%	24%	23-26%		
Ever performed a home FOBT (≥ 50 years)	57%	56-59%	54%	52-56%		
Performed a home FOBT in the last two years (≥ 50 years)	44%	42-46%	36%	34-38%	35%*	50%*
Ever had a sigmoidoscopy/colonoscopy (≥ 50 years)	58%	56-60%	63%	61-65%	37%*	50%*
Of those who had lower GI endoscopy, most recent endoscopy was a sigmoidoscopy (≥ 50 years)	24%	22-26%	16%	15-19%		
Of those who had lower GI endoscopy, most recent endoscopy was a colonoscopy (≥ 50 years)	76%	74-78%	84%	81-85%		
Up to Date Colorectal Cancer Testing (≥ 50 years)						
Never Tested	26%	24-28%	23%	21-25%		
Tested by not up to date	10%	9-12%	10%	9-11%		
Up-to-date with only FOBT in the last year	11%	10-13%	9%	8-10%		
Up-to-date with only sigmoiodoscopy in the last 5 years	6%	5-7%	5%	4-6&		
Up-to-date with FOBT in the last year and sigmoidoscopy in the last 5 years	5%	4-6%	3%	2-4%		
Up-to-date with colonoscopy in the last 10 years +/- FOBT	41%	39-43%	50%	48-52%		
Prostate Cancer Screening (all men ≥ 50 years and African American men ≥ 45 years)						
Ever had a PSA test among the PSA eligible group	73%	70-75%	77%	74-80%		
Had a PSA test in the last year in PSA eligible group	58%	55-61%	60%	57-63%		
Ever had a DRE among the PSA eligible group	88%	86-90%	86%	83-88%		
Had a DRE in the last year among PSA eligible group	60%	57-63%	58%	55-62%		
Had both a PSA and DRE in the last year	47%	44-50%	47%	44-50%		
Breast and Cervical Cancer Screening (women ≥ 40 years)						
Health care provider recommended a mammogram in the last year	86%	84-87%	84%	83-86%		
Health care provider recommended a Pap smear in the last year, among women who have not had a hysterectomy	98%	97-98%	77%	75-79%		
Ever had a mammogram	93%	92-94%	93%	91-94%		
Had a mammogram in the last two years	84%	82-82%	83%	82-85%	67%**	70%**
Ever had a clinical breast exam	94%	94-97%	96%	95-96%		
Ever had a Pap smear, among women who have not had a hysterectomy	97%	96-98%	98%	98-99%	92%^*	97%^*
Had a Pap smear in the last three years, among women who have not had a hysterectomy	89%	88-91%	90%	88-91%	79%^*	90%^*

* Adults ≥ 50 years
** Women ≥ 40 years
^* Women ≥ 18 years
^~ Persons ≥ 2 years
^^ Adults ≥ 40 years
^ Adults ≥ 18 years
~ Persons < 65 years
` Adults ≥ 20 years

Maryland Cancer Survey, 2004

TABLE 12-1 COMPARISON OF POPULATION SCREENING AND RISK BEHAVIOR CHARACTERISTICS MEASURED IN THE MCS 2002 AND THE MCS 2004 TO UNITED STATES BASELINE MEASUREMENTS AND HEALTHY PEOPLE 2010 OBJECTIVES

	MCS 2002		MCS 2004		US Baseline	HP 2010 Target
Selected Population Screening Characteristic	**wt %**	**95% CI**	**wt %**	**95% CI**	**%**	**%**
Oral Cancer Screening (≥ 40 years)						
Had a dental visit during the past year	76%	75-77%	76%	74-77%	44%^~	56%^~
Ever had an oral cancer exam	43%	41-44%	43%	42-45%		
Had an oral cancer exam in the last year	33%	32-35%	34%	32-35%	13%^^	20%^^
Skin Cancer Screening (≥ 40 years)						
Always or nearly always avoid sun between the hours of 10 am and 4 pm	37%	35-39%	42%	40-44%	28%^	
Always or nearly always use sunscreen with a SPF rating of 15 or higher when outdoors for an hour or more on a sunny day	33%	31-34%	34%	32-35%	31%^	
Always or nearly always wear a wide-brimmed hat or other hat that shades their face, ears and neck when outdoors for an hour or more on a sunny day	24%	23-25	25%	24-27%		
Always or nearly always wear protective clothing like a long sleeved shirt or long pants when outdoors for an hour or more on a sunny day	25%	24-27%	28%	27-30%	24%^	
Increase the proportion of adults who follow at least one protective measure that may reduce the risk of skin cancer	67%	65-68%	71%	69-72%	47%^	75%^
Access to Health Care (≥ 40 years)						
Has health insurance	94%	93-94%	93%	92-94%	83%~	100%~
Had no health insurance sometime in the last 12 months	3%	2-3%	5%	4-6%		
Life style Factors (≥ 40 years)						
Body mass index						
Healthy weight individuals BMI (18.5-24.9)	36%	35-38%	33%	31-35%	42%^	60%^
Overweight individuals (BMI 25.0-29.9)	35%	33-36%	38%	37-40%		
Obese individuals (BMI ≥ 30.0)	25%	24-27%	29%	27-31%	23%^	15%^
Current smoking status						
Never smokers	48%	47-50%	50%	48-52%		
Former smokers	33%	32-35%	33%	31-34%		
Current smokers	18%	17-20%	17%	16-19%	24`	12%`

* Adults ≥ 50 years
** Women ≥ 40 years
^* Women ≥ 18 years
^~ Persons ≥ 2 years
^^ Adults ≥ 40 years
^ Adults ≥ 18 years
~ Persons < 65 years
` Adults ≥ 20 years

Maryland Cancer Survey, 2004

Questionnaire for the Maryland Cancer Survey, 2004

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.

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 not, ask the next question to determine if there are people ages 18-39 years old in the household and continue with the survey for those 18-39 years.)

How many members of your household, including yourself are between the ages of 18 and 39? _____

(If there is at least one person in the household 40 years and older, the household will be invited to participate in the cancer screening survey. If there is no one in the household 40 years and older, the household will be invited to participate in the survey for those 18-39 years.)

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

Now I need to know their relative ages in order to complete the selection process. You do not need to tell me their actual names or ages. I just need to know who is the oldest, next oldest, etc. and you can identify them by their relationship to you, e.g. my spouse or sister or brother. To begin with:

Who is the oldest man who presently lives in this household? Who is the next oldest man who presently lives in this household? Etc.

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.

RECORD NUMBER ___ ___ ___ ___ ___

SECTION 1: HEALTH STATUS

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

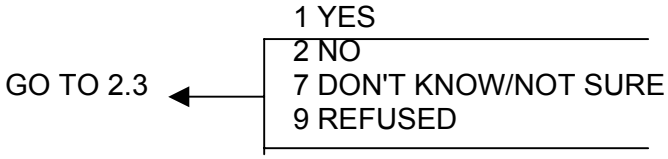
1.1. Would you say that in general your health is:

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

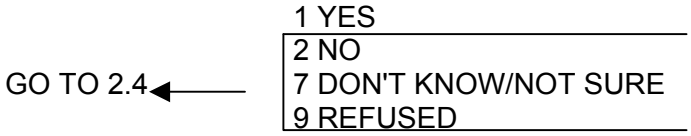
SECTION 2: HEALTH CARE ACCESS

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?



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



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 (≥6 MONTHS BUT < 12 MONTHS AGO)
3 Within the past 2 years (≥1 YEAR BUT < 2 YEARS)
4 Within the past 5 years (≥2 YEARS BUT <5 YEARS)
5 5 or more years ago
7 DON'T KNOW
9 REFUSED

2.4 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 (≥1 YEAR BUT < 2 YEARS)
3 Within the past 5 years (≥2 YEARS BUT < 5 YEARS)
4 5 or more years ago
7 DON'T KNOW
9 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 What do you think are the main things which increase a person's chance of developing colon cancer? (DO NOT READ RESPONSES. CIRCLE ALL ITEMS LISTED BELOW THAT WERE NOTED BY THE RESPONDENT. RECORD VERBATIM ALL OTHER RESPONSES)

1 OLDER AGE
2 HAVING A RELATIVE WITH BOWEL CANCER, GENETICS, HEREDITY
3 DIET
4 ENVIRONMENTAL FACTORS, (SUCH AS AIR POLLUTION)
5 SMOKING TOBACCO
6 OBESITY OR OVERWEIGHT
7 OTHER: SPECIFY _
_____
8 DON'T KNOW/NOT SURE
9 REFUSED

3.2 Has a parent, brother, sister or child of yours ever been diagnosed with colon cancer? (WE ARE INTERESTED IN 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
9 REFUSED

3.3 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?

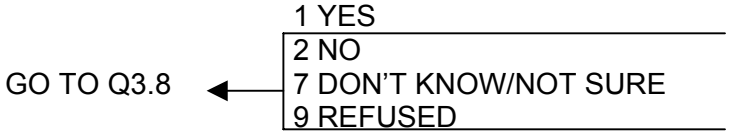
1 YES

2 NO
7 DON'T KNOW/NOT SURE
9 REFUSED

3.4 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 VISIT IN PAST TWELVE MONTHS
7 DON'T KNOW/NOT SURE
9 REFUSED

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



3.6 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 (≥1 YEAR BUT < 2 YEARS AGO)
3 Within the past 3 years (≥2 YEARS BUT < 3 YEARS AGO)
4 Within the past 5 years (≥3 YEARS BUT < 5 YEARS AGO)
5 5 or more years ago
8 Never
7 DON'T KNOW/NOT SURE
9 REFUSED

3.7 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 specific problem
3 Follow-up test of an earlier test or screening exam
4 Family history
5 Other
7 DON'T KNOW
9 REFUSED

3.8 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
9 REFUSED

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

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

3.10 Have you ever had a sigmoidoscopy or colonoscopy?

1 YES
2 NO
GO TO 3.14 ◄ 7 DON'T KNOW/NOT SURE
9 REFUSED

3.11 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
9 REFUSED

3.12 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 (≥1 YR BUT < 2 YRS AGO)
3 Within the past 5 years (≥2 YRS BUT < 5 YRS AGO)
4 Within the past 10 years (≥5 YRS BUT < 10 YRS AGO)
5 10 or more years ago
7 DON'T KNOW/NOT SURE
9 REFUSED

3.13 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 specific problem
3 Follow-up test of an earlier test or screening exam (Fecal Occult Blood Test or sigmoidoscopy)
4 Family history
5 Other
7 DON'T KNOW/NOT SURE
9 REFUSED

ASK 3.14 ONLY IF NO TO Q3.5 AND Q3.10 (HAS NEVER HAD BLOOD STOOL TEST OR SIGMOIDOSCOPY OR COLONOSCOPY)

3.14 What is the most important reason you have **never** had any of the tests we just talked about, a blood stool test, sigmoidoscopy or colonoscopy? (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
99 REFUSED

3.15 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
9 REFUSED

3.16 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
9 REFUSED

At this point we ask questions about cancer screening that are specific to men or women. Can you please tell me if you are male or female.

Variable sex2 1) male 2) female

IF RESPONDENT IS FEMALE, GO TO NEXT SECTION

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 BLOOD RELATIVES ONLY, DO NOT INCLUDE

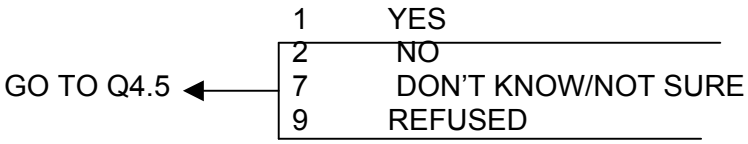
FAMILY MEMBERS RELATED ONLY THROUGH MARRIAGE SUCH AS STEPFATHER, STEPBROTHER OR ADOPTED BROTHERS OR SONS)

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

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
9 REFUSED

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 had this test?



4.4 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 (≥1 YEAR BUT < 2 YEARS AGO)
3 Within the past 3 years (≥2 YEARS BUT < 3 YEARS AGO)
4 Within the past 5 years (≥3 YEARS BUT < 5 YEARS AGO)
5 5 or more years ago
8 Never
7 DON'T KNOW/NOT SURE
9 REFUSED

IF RESPONDENT HAS NEVER HAD A PSA TEST ASK 4.5. IF YES TO 4.3 SKIP TO 4.6.

4.5 What is the most important reason you have **never** had a PSA test? (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 Other , SPECIFY: _____
77 DON'T KNOW/NOT SURE
99 REFUSED

4.6 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?

	1	YES
GO TO Q 6.1 ←	2	NO
	7	DON’T KNOW/NOT SURE
	9	REFUSED

4.7 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 (≥1 YEAR BUT < 2 YEARS AGO)
3 Within the past 3 years (≥2 YEARS BUT < 3 YEARS AGO)
4 Within the past 5 years (≥3 YEARS BUT < 5 YEARS AGO)
5 5 or more years ago
8 Never
7 DON'T KNOW/NOT SURE
9 REFUSED

IF RESPONDENT IS MALE, GO TO NEXT SECTION

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 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
9 REFUSED

5.2 In the PAST YEAR, has a doctor or other health professional recommended breast cancer screening such as a mammagram or a breast exam?

1 YES

2 NO
3 NO DOCTOR VISIT IN PAST TWELVE MONTHS
7 DON'T KNOW/NOT SURE
9 REFUSED

5.3 Have you ever had a mammogram?

	1	YES
GO TO 5.6 ◄	2	NO
	7	DON'T KNOW/NOT SURE
	9	REFUSED

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 (≥1 YEAR BUT < 2 YEARS AGO)
3 Within the past 3 years (≥2 YEARS BUT < 3 YEARS AGO)
4 Within the past 5 years (≥3 YEARS BUT < 5 YEARS AGO)
5 5 or more years ago
8 Never
7 DON'T KNOW/NOT SURE
9 REFUSED

5.5 Was your last 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
9 REFUSED

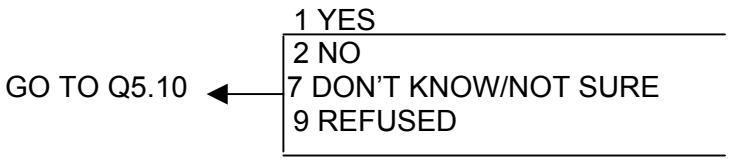
IF RESPONDENT HAS HAD TEST IN PAST TWO YEARS SKIP TO Q5.7.

5.6 What it 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
99 REFUSED

5.7A clinical breast exam is when a doctor, nurse, or other health professional feels the breast for lumps. Have you ever had a clinical breast exam?



5.8 How long has it been since your last breast exam? (READ ONLY IF NECESSARY)

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

5.9 Was your last breast exam 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
9 REFUSED

5.10 A Pap smear 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. Have you ever heard of this test?

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

5.11 In the PAST YEAR, has a doctor or other health professional RECOMMENDED that you have a Pap smear?

1 YES
2 NO
3 NO DOCTOR VISIT IN PAST TWELVE MONTHS
7 DON'T KNOW/NOT SURE
9 REFUSED

5.12 A. Have you ever had a Pap smear?

	1	YES
	2	NO
GO TO Q5.14	7	DON'T KNOW/NOT SURE
	9	REFUSED

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

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

IF RESPONDENT HAS HAD PAP IN PAST 3 YEARS SKIP TO Q5.15.

5.14 What is the most important reason you have {NEVER had a Pap smear /NOT had a Pap smear 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
99 REFUSED

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

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

SECTION 6: SKIN CANCER

Now I'm going to ask you some questions about sun exposure.

6.1 How often do you avoid the sun between the hours of 10:00 and 4:00 p.m.?

1 always
2 nearly always
3 sometimes
4 seldom
5 never
6 don't go out in sun
7 DON'T KNOW
9 REFUSED

6.2 When outdoors for an hour or more on a sunny day, how often do you use a sunscreen lotion with a SPF rating of 15 or higher?

1 always
2 nearly always
3 sometimes
4 seldom
5 never
6 don't go out in sun
7 DON'T KNOW
9 REFUSED

6.3 When outdoors for an hour or more on a sunny day, how often do you wear a wide-brimmed hat or any other hat that shades your face, ears, and neck from the sun? BASEBALL CAPS DON'T COUNT.

1 always
2 nearly always
3 sometimes
4 seldom
5 never
6 don't go out in sun
7 DON'T KNOW
9 REFUSED

6.4 When outdoors for an hour or more on a sunny day, how often do you wear protective clothing like a long sleeved shirt and long pants?

1 always
2 nearly always
3 sometimes
4 seldom
5 never
6 don't go out in sun
7 DON'T KNOW
9 REFUSED

6.5 After several months of not being in the sun, if you went out in the sun without sunscreen, a hat, or protective clothing for **an hour**, which one of these would happen to your skin?

1 get a severe sunburn with blisters
2 a severe sunburn for a few days with peeling
3 mildly burned with some tanning
4 turn darker without a sunburn
5 nothing would happen in half an hour
6 OTHER: SPECIFY: _____
7 DON'T KNOW
8 REFUSED

6.6 This next question is about sunburns. How many times in the past year have you had a sunburn, including times when even a small part of you skin was red or painful for more than 12 hours?

___ ___	TIMES IN PAST YEAR
7 7	DON'T KNOW/NOT SURE
9 9	REFUSED

6.7 Have you used any sort of artificial tanning device that emits UV radiation, such as a tanning lamp or a tanning bed, in the past year?

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

SECTION 7 : ORAL HEALTH/ORAL CANCER

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

7.1 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 (≥1 YEAR BUT < 2 YEARS AGO)
3 Within the past 3 years (≥2 YEARS BUT < 3 YEARS AGO)
4 Within the past 5 years (≥3 YEARS BUT < 5 YEARS AGO)
5 5 or more years ago
8 Never
7 DON'T KNOW/NOT SURE
9 REFUSED

7.2 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

GO TO Q 8.1 ←	3	NO
	7	DON'T KNOW/NOT SURE
	9	REFUSED

7.3 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 (≥1 YEAR BUT < 2 YEARS AGO)
3 Within the past 3 years (≥2 YEARS BUT < 3 YEARS AGO)
4 Within the past 5 years (≥3 YEARS BUT < 5 YEARS AGO)
5 5 or more years ago
8 Never
7 DON'T KNOW/NOT SURE
9 REFUSED

7.4 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
9 REFUSED

SECTION 8: DEMOGRAPHICS

8.1 What is your age?

___ ___ ___(Code age in years)

0 0 7 DON'T KNOW/NOT SURE
0 0 9 REFUSED

8.2 Are you Hispanic and/or Latino?

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

8.3 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
9 REFUSED

IF MORE THAN ONE RESPONSE TO Q8.3, CONTINUE. OTHERWISE, GO TO Q8.5

8.4 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 _____)
8 NO ADDITIONAL CHOICES
7 DON'T KNOW/NOT SURE
9 REFUSED

8.5 Are you:

1 Married
2 Divorced
3 Widowed
4 Separated
5 Never Married
6 A partner of an unmarried couple
9 REFUSED

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

___ ___ NUMBER OF ADULTS

9 9 REFUSED

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

___ ___ NUMBER OF CHILDREN

8 8 NONE
9 9 REFUSED

8.8 What is the highest grade or year of school you completed?

(READ ONLY IF NECESSARY)

1 Never attended school or only attended kindergarten
2 Grades 1 through 8 (Elementary)
3 Grades 9 through 11 (Some high school)
4 Grade 12 or GED (High school graduate)
5 College 1 year to 3 years (Some college or technical school)
6 College 4 years (College graduate)

7 Master's Degree
8 Advanced professional or doctoral degree
9 REFUSED

8.9 Are you currently:

1 Employed for wages
2 Self-employed
3 Out of work for more than 1 year
4 Out of work for less than 1 year
5 A Homemaker
6 A Student
7 Retired or
8 Unable to work
9 REFUSED

8.10 Is your annual household income from all sources:
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
9 9 REFUSED

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

__ __ __ WEIGHT
POUNDS
7 7 7 DON'T KNOW/NOT SURE
9 9 9 REFUSED

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

__ __/__ __ Height
ft/inches
7 7 7 DON'T KNOW/NOT SURE

9 9 9 REFUSED

8.13 What county do you live in? _____ CODE ___ ___ ___

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

7 7 7 DON'T KNOW/NOT SURE
9 9 9 REFUSED

8.14 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.

	1	YES
	2	NO
GO TO Q8.16 ◄	7	DON'T KNOW/NOT SURE
	9	REFUSED

8.15 How many of these are residential numbers?

__ RESIDENTIAL TELEPHONE NUMBERS [6=6 OR MORE]
7 DON'T KNOW/NOT SURE
9 REFUSED

8.16 INDICATE GENDER OF RESPONDENT. ASK ONLY IF NECESSARY

1 MALE
2 FEMALE

SECTION 9: EXERCISE/PHYSICAL ACTIVITY

The next series of questions are about exercise and physical activities

IF "EMPLOYED" OR "SELF-EMPLOYED" TO Q8.9, CONTINUE. OTHERWISE GO TO Q9.2

9.1 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
9 REFUSED

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.

9.2. Now, thinking about the moderate physical activities you do **[fill in (when you are not working) if "employed" or "self-employed" to core Q8.9]** 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?

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

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

___ Days per week

88 Do not do any moderate physical activity for 10 or more minutes at a time **Go to 9.5**
77 DON'T KNOW/NOT SURE
99 REFUSED

9.4. 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 DON'T KNOW/NOT SURE
9 9 9 REFUSED

9.5 Now thinking about the vigorous physical activities you do **[fill in (when you are not working) if "employed" or "self-employed" to core Q8.9]** 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?

1 Yes
2 No
7 DON'T KNOW/NOT SURE
9 REFUSED

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

___ Days per week

88 Do not do any vigorous physical activity for 20 or more minutes at a time (GO TO 9.8 if appropriate)
77 DON'T KNOW/NOT SURE
99 REFUSED

9.7. 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 DON'T KNOW/NOT SURE
9 9 9 REFUSED

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 9.8. ALL OTHERS SKIP TO NEXT SECTION.

9.8 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 limit
4 There's no place to exercise
5 The cost is too high
6 Some other reason. (SPECIFY: _____)
7 DON'T KNOW/NOT SURE
9 REFUSED

SECTION 10: 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?

10.1 How many servings of fruit juices such as orange, grapefruit, or tomato do you drink per week or per day?(A serving is ¾ 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
9 9 9 REFUSED

10.2 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
9 9 9 REFUSED

10.3 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
9 9 9 REFUSED

10.4 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
9 9 9 REFUSED

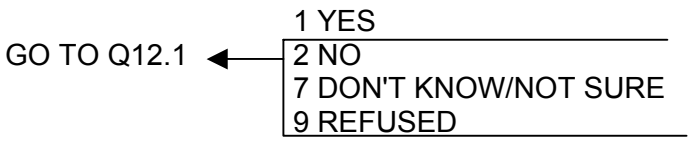
10.5 Not including seafood or poultry, how many servings of meat such as beef, pork, lamb or veal do you eat per day or per week. Please include foods that are made with meat such as soups, stews, sandwiches, lunch meats, and casseroles. (a serving size of meat is about the size of a deck of cards.)

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
9 9 9 REFUSED

SECTION 11: FOLIC ACID

11.1 Do you currently take any vitamin pills or supplements? (Include liquid supplements).



11.2 Are any of these a multivitamin?

GO TO Q11.4 ←

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

11.3 Do any of the vitamin pills or supplements you take contain folic acid?

1 YES
2 NO
GO TO Q12.1 ← 7 DON'T KNOW/NOT SURE
9 REFUSED

11.4 How often do you take this vitamin pill or supplement?

1 ___ ___ Times per day
2 ___ ___ Times per week
3 ___ ___ Times per month
7 7 7 DON'T KNOW/NOT SURE
9 9 9 REFUSED

SECTION 12: ALCOHOL CONSUMPTION

12.1 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 often have you had at one or more drinks of any alcoholic beverage?

1 __ __ Days per week
2 __ __ Days in past 30

8 8 8 NO DRINKS IN PAST 30 DAYS
GO TO Q 13.1 ← 7 7 7 DON'T KNOW/NOT SURE
9 9 9 REFUSED

12.2 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
9 9 REFUSED

12.3 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

8 8 NONE
7 7 DON'T KNOW/NOT SURE
9 9 REFUSED

SECTION 13: TOBACCO USE

13.1 Have you smoked at least 100 cigarettes in your entire life?
(5 Packs = 100 cigarettes)

	1	YES
	2	NO
GO TO Q14.1 ←	7	DON'T KNOW/NOT SURE
	9	REFUSED

13.2 Do you now smoke cigarettes every day, some days, or not at all?

	1	EVERY DAY
	2	SOME DAYS
	3	NOT AT ALL
GO TO Q 13.5 ←	7	DON'T KNOW/NOT SURE
	9	REFUSED

13.3. 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
9	REFUSED

13.4. During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?

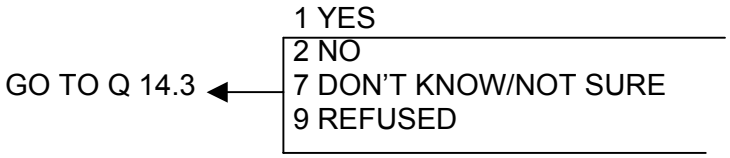
	1	YES
	2	NO
GOT TO Q 14.1 ←	7	DON'T KNOW/NOT SURE
	9	REFUSED

5Which 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	Nonnicotine medication (Zyban or Bupropion)
4	Behavioral therapy alone, no medication
5	Alternative therapy such as accupunture, hypnosis or an herbal remedy
6	Other: Specify _____
7	DON'T KNOW/NOT SURE
9	REFUSED

SECTION 14: OTHER TOBACCO PRODUCTS

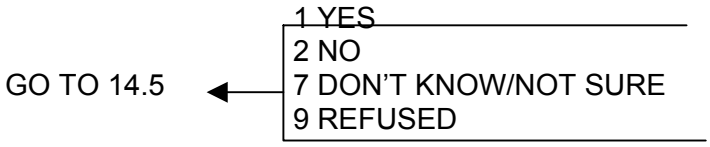
14.1. Have you ever used or tried any smokeless tobacco products such as chewing tobacco or snuff?



14.2 Do you currently use chewing tobacco or snuff every day, some days, or not at all?

1 EVERY DAY
2 SOME DAYS
3 NOT AT ALL
7 DON'T KNOW/NOT SURE

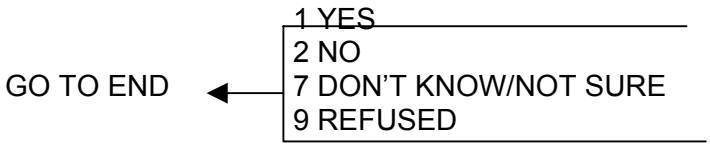
14.3 Have you ever smoked a cigar, even one or two puffs?



14.4 Do you now smoke cigars 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

14.5 In some countries, ,people smoke tobacco from water pipes. Have you ever smoked tobacco in a water pipe or bong even one or two puffs?



14.6 Do you now smoke tobacco in a water pipe every day, some days, or not at all?

1 EVERY DAY
2 SOME DAYS
3 NOT AT ALL
7 DON'T KNOW/NOT SURE
9 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.