Maryland Cancer Surveys:
Baltimore City Cancer Survey, 2007

A Survey of Cancer Screening and Behavioral Risk Factors Among Baltimore City Residents

Funded by

Cigarette Restitution Fund Program
Cancer Prevention, Education, Screening, and Treatment Program

Conducted by

Maryland Department of Health and Mental Hygiene and
the Department of Epidemiology and Preventive Medicine
at the University of Maryland, Baltimore

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List of Acronyms

ACS	American Cancer Society
BCCP	Breast and Cervical Cancer Program
BCCS	Baltimore City Cancer Survey
BMI	body mass index
BRFSS	Behavioral Risk Factor Surveillance System
CASRO	Council of American Survey Research Organizations
CATI	computer-assisted telephone interview
CBE	clinical breast examination
CCSC	Center for Cancer Surveillance and Control
CDC	Centers for Disease Control and Prevention
CI	confidence interval
CPEST	Cancer Prevention, Education, Screening, and Treatment
CRC	colorectal cancer
CRF	Cigarette Restitution Fund
DCBE	double contrast barium enema
DHMH	Department of Health and Mental Hygiene
DRE	digital rectal examination
FDR	first-degree relative
FIT	fecal immunochemical test
FOBT	fecal occult blood test
FY	fiscal year
GED	General Equivalency Diploma
GI	gastrointestinal
HCP	health care provider
HMO	health maintenance organization
HP 2010	Healthy People 2010
IRB	Institutional Review Board
MCS	Maryland Cancer Survey
MHIP	Maryland Health Insurance Plan
MSG	Genesys – Marketing Systems Group
NHANES	National Health and Nutrition Examination Survey
NHIS	National Health Interview Survey
NIAAA	National Institute on Alcohol Abuse and Alcoholism
PSA	prostate-specific antigen
RDD	random-digit dialing
SEU	Surveillance and Evaluation Unit
UMB	University of Maryland, Baltimore
USPSTF	U.S. Preventive Services Task Force

Maryland Cancer Surveys:
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Highlights

The Baltimore City Cancer Survey (BCCS) is a population-based land-line telephone survey designed to obtain information about cancer screening practices, knowledge of cancer and cancer screening, and lifestyle factors related to cancer among Baltimore City residents age 40 years and older. The BCCS was designed to supplement data obtained from the 2002, 2004, and 2006 Maryland Cancer Surveys (MCS), and to provide additional information on cancer screening practices, risk factors, and health care access among African Americans living in Baltimore City. A review of sampling data from the three MCS surveys showed that African Americans have been underrepresented in the MCS, relative to their overall numbers in the Maryland population. The information from the BCCS may help identify disparities in cancer screening and risk behaviors for African Americans and other segments of the Baltimore City population and may point to new directions for interventions that will increase cancer screening and modify associated risk behaviors. Both the MCS and the BCCS were commissioned by the Surveillance and Evaluation Unit of the Center for Cancer Surveillance and Control of the Maryland Department of Health and Mental Hygiene (DHMH) under the Cigarette Restitution Fund (CRF) Program and conducted by the University of Maryland at Baltimore (UMB). All of the results in this summary document are based on self-reported information provided by survey participants.

Survey Sample and Demographics

- The BCCS was successful in completing interviews of 1,203 Baltimore City residents, of which 686 (57%) were African American, 481 (40%) were White, and 36 (3%) were of other races.
- Women made up 69% of the sample.
- Approximately 64% of respondents were less than age 65 years.
- About one-third (34%) of the respondents reported an annual household income of less than $25,000.
- Eighty-one percent (81%) of the respondents completed at least a high school education.
- The results in the report are weighted to the Baltimore City population by age, sex, and race.

Comparisons to Healthy People 2010 Targets

Based on results of the BCCS, Baltimore City residents meet or exceed the Healthy People (HP) 2010 targets for the following cancer screening tests and other health measures:

- Ever having colonoscopy or sigmoidoscopy (lower gastrointestinal [GI] endoscopy): 62% of Baltimore City residents age 50 years and older reported ever having at least one of these procedures, compared to the HP 2010 target of 50%.
- Fecal occult blood test (FOBT) in the past 2 years: 35% of Baltimore City residents age 50 years and older reported having a recent FOBT, compared to the HP 2010 target of 33%.

- Mammogram in the past 2 years: 81% of Baltimore City women age 40 years and older reported having a mammogram in the past 2 years, compared to the HP 2010 target of 70%.
- Ever having a Pap test: 98% of Baltimore City women age 40 years and older reported ever having a Pap test, compared to the HP 2010 target of 97% (for women age 18 years and older).
- Oral cancer screening in the past year: 26% of Baltimore City residents age 40 years and older said they have had an oral cancer screening in the past year, compared to the HP 2010 target of 20%.
- Dental visits: 56% of Baltimore City residents age 40 years and older reported visiting a dentist for any reason in the past year, meeting the HP 2010 target of 56% (for persons age 2 years and older).

Baltimore City residents do not yet meet the HP 2010 targets for the following measures:

- Pap test in the past 3 years: 86% of Baltimore City women age 40 years and older said they had a Pap test in the past 3 years, compared to the HP 2010 target of 90% (for women age 18 years and older).
- Health insurance: 86% of Baltimore City residents age 40 years and older reported having health insurance. This figure drops to 82% for persons age 40-64 years, and falls far short of the HP 2010 target of 100% coverage for all persons less than age 65 years.
- Smoking: 26% of Baltimore City residents age 40 years and older reported current cigarette use, compared to the HP 2010 target of 12% (for adults age 18 years and older).
- "Healthy" body mass index: 29% of Baltimore City residents age 40 years and older are in the healthy weight category compared to the HP 2010 target of 60% (based on self-reported height and weight for adults age 20 years and older).
- Obesity: 34% of Baltimore City residents age 40 years and older are in the obese category, compared to the HP 2010 target of 15% (for adults age 20 years and older).
- Fruit and vegetable consumption: 57% of Baltimore City residents age 40 years and older said they eat the recommended two or more servings of fruit per day, compared to a HP 2010 target of 75%; 29% reported eating three or more daily servings of vegetables, compared to the HP target of 50%. (HP 2010 guidelines for fruit and vegetable consumption pertain to persons age 2 years and older.)
- Vigorous exercise: 17% of Baltimore City residents age 40 years and older reported engaging in vigorous activity 3 or more days per week for at least 20 minutes per occasion, compared to the HP 2010 target of 30% (for adults age 18 years and older).
- Moderate or vigorous physical activity: 40% of Baltimore City residents age 40 years and older reported engaging in regular physical activity – either 20 minutes of vigorous activity 3 or more days per week or 30 minutes of moderate activity 5 or more days a week, compared to a target of 50% (for adults age 18 years and older).

Racial Disparities in Cancer Screening and Cancer Risk Factors

The BCCS showed important differences in reported cancer screening prevalence across demographic groups, including race, age, education, income, and health insurance status. (In this report, the term "prevalence" is defined as the percentage of the population with a given characteristic at the time of the survey.) Compared with White residents, African Americans reported statistically significantly lower prevalence of the following cancer screening measures:

- Ever having lower GI endoscopy (60% among African American residents vs. 67% for Whites among adults age 50 years and older– marginal significant difference)
- Ever having oral cancer screening (30% vs. 51%) among adults age 40 years and older
- Having an oral cancer exam in the past year (16% vs. 43%) among adults age 40 years and older

Among Baltimore City residents age 40 years and older, African Americans were also significantly less likely than Whites to report

- having health insurance (81% of African Americans vs. 94% of Whites)
- having a primary health care provider (88% vs. 94%)
- having a dental visit in the past year (46% vs. 72%)

Among Baltimore City residents age 40 years and older, African Americans were significantly more likely than Whites to report

- a higher prevalence of current cigarette smoking (31% vs. 16%)
- a body mass index (BMI) in the obese range (40% vs. 25%)

Health Care Access and Cancer Screening

Baltimore City residents who reported being without health care coverage or access to health care were significantly less likely to report cancer screening than persons with insurance and/or access to care, as summarized below.

- No health care coverage: Compared to those with health insurance, those age 40 years and older without health care coverage have significantly lower rates of ever being screened for colorectal, prostate, breast, and oral cancer, as well as lower prevalence of up-to-date screening for all tests except having a Pap test within the past 3 years.
- Currently have insurance but were without health insurance sometime within the past year: Compared to those who had continuous health insurance coverage, those who were without insurance sometime in the past year reported lower prevalence of ever having lower GI endoscopy or mammography, oral cancer screening in the past year, or mammography in the past 2 years.
- Do not have a personal doctor or primary health care provider (HCP): Compared to those who do have a primary HCP, Baltimore City residents who do not have a primary HCP reported significantly lower prevalence of every type of screening test except ever

having a Pap test or FOBT, having an FOBT in the past 2 years, and having a DRE in the past year.

- No routine checkup within the past 2 years: For most types of cancer screening tests, residents age 40 years and older who have not had a physical exam in the past 2 years are significantly less likely to report screening than those who said they had a checkup within 2 years.

Receiving an HCP's recommendation for cancer screening is a very important factor in whether a person has a cancer screening test. Baltimore City residents who said that an HCP had recommended colorectal cancer (CRC) screening (i.e., a home FOBT or lower GI endoscopy), or a mammogram or Pap test for women, reported much higher prevalence of these screening tests than those who reported not receiving such recommendations. For most cancer screening tests examined in the BCCS, the lack of a doctor's recommendation was often a prominent reason cited by respondents for not having the test.

Summary

- Baltimore City residents age 40 years and older, as a group, have achieved or exceeded many of the HP 2010 targets for cancer screening.
- Baltimore City does not meet several important HP 2010 lifestyle and behavioral goals aimed at reducing risk of cancer and other chronic diseases. The prevalence of smoking and obesity in Baltimore City both far exceed HP 2010 goals, and residents are not meeting targets for increasing physical activity or fruit and vegetable consumption.
- African American residents age 40 years and older are significantly less likely than White residents to report
  - having health insurance;
  - having an HCP; or
  - having had a dental visit in the past year.
- Compared with Whites, African Americans in Baltimore City have a significantly lower reported prevalence of
  - CRC screening with lower GI endoscopy (marginally significant);
  - oral cancer screening;
  - familiarity with CRC screening tests; or
  - receiving a recommendation from an HCP for CRC screening with lower GI endoscopy.
- African American residents of Baltimore City are more likely than Whites to be obese and to smoke cigarettes.
- Baltimore City residents who do not have health insurance or a primary HCP have significantly lower prevalence of screening for CRC, prostate cancer, or oral cancer than those who do.
- Compared with other urban residents in the state, Baltimore City residents are significantly less likely to have ever been screened for or to be up-to-date with CRC or oral cancer screening, and have a significantly higher prevalence of obesity and current smoking. Baltimore City also has a higher proportion of residents without health insurance compared to other urban areas of the state.

Strengths and Limitations of the Baltimore City Cancer Survey

Strengths of the BCCS:

- The survey is based on a population-based sample, with results weighted to the Baltimore City population, using methods similar to the national Behavioral Risk Factor Surveillance System.
- The sample focused on Baltimore City residents who were 40 years of age and older.

Limitations of the BCCS:

- The BCCS was a telephone survey using only land-line numbers, not including cellular telephones.
- Only persons who live in residences (excludes the institutionalized population) were included in the survey.
- The BCCS interviews were conducted only in English. A total of 70 telephone numbers (0.3% of the total sample) were excluded because of a language barrier.

Chapter 1. Introduction

In 2000, the Maryland State Legislature established the Cigarette Restitution Fund (CRF) with monies received from the multistate tobacco settlement, which in turn led to the establishment of the Cancer Prevention, Education, Screening, and Treatment (CPEST) Program in the Center for Cancer Surveillance and Control (CCSC) at the Maryland Department of Health and Mental Hygiene (DHMH). Under the CPEST program, seven cancers were targeted because of their impact on mortality in Maryland or because they are amenable to primary or secondary prevention: lung and bronchus, colorectal, breast, cervical, prostate, oral, and melanoma skin cancer.

A primary goal of the CRF CPEST Program is to reduce disparities in cancer mortality between ethnic minorities and Whites in Maryland. Specific strategies that have been implemented to accomplish this goal include: increasing public and community awareness of cancer health disparities; increasing cancer prevention, screening, and treatment among minority and underserved populations; expanding partnerships between the local health departments and minority groups; and engaging minority groups and communities in the fight against cancer. While much remains to be done in reducing cancer disparities in Maryland, there is evidence pointing to substantial progress. During the first 5 years of the CRF program (2000-2005), the difference in cancer mortality between Whites and Blacks in Maryland was reduced by 50%.[1]

The Surveillance and Evaluation Unit (SEU) of the CCSC is charged with collecting, analyzing, and monitoring data related to these seven cancers and with measuring and evaluating the results of cancer prevention, education and screening in Maryland. In 2002, the Maryland Cancer Survey (MCS) was commissioned by the SEU and performed by the Department of Epidemiology and Preventive Medicine, School of Medicine at the University of Maryland, Baltimore (UMB). The purpose of the survey was to assess cancer screening practices and cancer risk behaviors for targeted cancers among persons age 40 years and older living in Maryland. The MCS 2002 was conducted statewide via land-line random-digit dialing (RDD), with 5,040 respondents.[2] Slightly modified versions of the survey were repeated in 2004[3] (5,004 respondents) and 2006[4] (5,149 respondents) to evaluate trends in cancer screening behaviors throughout the state.

Purpose of the Baltimore City Cancer Survey

The primary purpose of the Baltimore City Cancer Survey (BCCS) was to obtain a more complete picture of cancer screening practices and risk behaviors reported by urban residents of

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[1] Maryland Department of Health and Mental Hygiene (MD DHMH), Office of Minority Health and Health Disparities. Maryland Health Disparities Data Highlights, July 2008. Available at http://www.dhmh.state.md.us/hd/pdf/2008/nov08/Maryland_Health_Disparities_Data_Highlights_July_2008.pdf. Last accessed February 17, 2009.

[2] MD DHMH. Maryland Cancer Survey, 2002. Baltimore, MD. Available at http://www.fha.state.md.us/pdf/cancer/MCS_Report_2002-V3.pdf. Last accessed February 26, 2009.

[3] MD DHMH. Maryland Cancer Survey, 2004. Baltimore, MD. Available at http://www.fha.state.md.us/pdf/cancer/MCS2004.pdf. Last accessed February 26, 2009.

[4] MD DHMH. Maryland Cancer Survey, 2006. Baltimore, MD. Available at http://www.fha.state.md.us/pdf/cancer/MCS20006.pdf. Last accessed February 26, 2009.

Maryland, particularly African Americans. The lack of research and information on existing cancer health disparities and their causes is a key challenge to reducing cancer health disparities.[5] In addition to tracking statewide cancer screening rates, the MCS has as one of its key objectives to examine disparities in cancer screening and risk factors. However, African Americans have been underrepresented in the MCS, relative to their overall numbers in the Maryland population. For example, in the MCS 2006, only 16.2% of respondents age 40 years and older self-identified as African American or Black, although African Americans comprise 25.3% of the Maryland population age 40 years and older and 29.2% of the urban population in the state that is 40 years and older.

The BCCS described in this report was conducted to gather critical information on cancer risk factors, screening behaviors, health care access, and demographics for a sample of persons living in Baltimore City, with a sample size sufficient to calculate race-specific rates for African Americans and Whites. The information from this survey may help identify racial disparities in cancer screening rates and risk behaviors in Baltimore City. 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 mortality rates are anticipated to decline in Maryland.

[5] Centers for Disease Control and Prevention (CDC). Health Disparities in Cancer. National Center for Chronic Disease Prevention and Health Promotion. Atlanta, GA. Available at http://www.cdc.gov/cancer/minorityawareness/overview.htm. Last accessed February 17, 2009.

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

Sample Design

The BCCS was conducted as a population-based, random-digit-dial, computer-assisted telephone interview (CATI), using list-assisted disproportionate stratified sampling. This method is similar to that of the statewide MCS and is patterned after 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 BCCS respondents were limited to persons age 40 years and older residing in private households in the city of Baltimore. People not eligible for the survey included those who were less than age 40 years, those who were unable to communicate because of a physical or mental impairment, those who could not respond in English, and those living in group homes or institutions.

Genesys - Marketing Systems Group (MSG) provided a pool of 24,000 random telephone numbers. The survey included two types of telephone number "blocks": "listed one-plus" and "not listed one-plus" blocks. Each one-plus block contains 100 consecutive phone numbers, at least one of which is known to be a residential phone number. The "listed one-plus" blocks contain all the listed telephone numbers from the one-plus block of numbers and is known as the high density stratum. The "not listed one-plus" blocks are the remaining one-plus numbers after the listed numbers are removed and constitute the medium density block. "Not listed one-plus" phone numbers were sampled at two-thirds the rate of the listed one-plus telephone numbers.

BCCS Questionnaire

The BCCS questionnaire was based on the MCS 2006 questionnaire and included validated questions from national and state surveys such as the BRFSS, the National Health Interview Survey (NHIS), the National Health and Nutrition Examination Survey (NHANES), and the DHMH Oral Health Survey, as well as some questions specifically developed for the BCCS. Institutional Review Board (IRB) approval was received from the UMB, School of Medicine IRB and from the DHMH IRB. The BCCS questionnaire is included at the end of this report.

Data Collection

REDA International, Inc., a survey and research firm located in Wheaton, Maryland, conducted the BCCS 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, REDA confirmed the number to be a residential phone number (cell phones and non-residences were excluded). If REDA determined that there was 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.

[1] Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System, User Guide, Version 3.0. Atlanta, GA, 2005. Available at http://www.cdc.gov/brfss/pdf/userguide.pdf. Last accessed February 17, 2009.

Interviewers asked questions about demographics, cancer screening behaviors, health risk factors, and access to health care.

Twenty-three thousand four hundred (23,400) telephone numbers were pre-screened or called. Of these, 5.2% (1,210 phone numbers) resulted in completed interviews; 45.2% (10,587) were non-working numbers; 12.1% (2,820) were phone numbers of a business or institution; 7.5% (1,762) were a telephone answering device; 5.4% (1,263) resulted in no answer on any attempt; 3.3% (780) were a cellular phone contact; and 2.5% (580) were a dedicated fax/modem. Approximately 0.3% (70) of the numbers were ineligible due to a language barrier. The remaining 4,328 phone numbers (18.5%) were ineligible for a variety of reasons. The Council of American Survey Research Organizations (CASRO) response rate, defined as Completed Interviews/(Known Eligible + Presumed Eligible), was 53.0%. The completion rate, defined as Completed Interviews/Known Eligible, was 83.5%.

Data Analysis

A final weight was assigned to each respondent, according to the BRFSS weighting protocol.[2] Respondents who refused to report race (n=7) were omitted from the analysis, since race (in addition to age and gender) was required for weighting, resulting in a final analytic sample of 1,203 persons. For eight respondents who did not report their age, we imputed an age based on the mean age of other respondents who had the same race and gender. Pre-stratification weighting was based on the sampling probability by residential telephone sampling among the two density strata of phone numbers ("listed one-plus" and "not listed one-plus"), the number of adults age 40 years and older in the respondent's household, and the inverse of the number of residential telephone numbers in each household. Post-stratification weighting was calculated as the number of adults age 40 years and older in an age-race-gender category in the city's population divided by the sum of the pre-stratification weights for the respondents in that same age-race-gender category. Respondents were asked to list their race as one of the following: White; Black or African American; Asian; Native Hawaiian or Other Pacific Islander; American Indian or Alaska Native; or Other. Because of small numbers of respondents in some race groups, people who reported their race as something different from White or Black/African American were grouped together as people of Other Races (n=36). The age strata consisted of 5-year age groups (e.g., 40-44, 45-49, etc.) ranging from 40 through 69 years of age. Those age 70 years and older were combined into one age stratum because of small sample size in the older age-race-gender strata. A final weight was calculated based on the pre- and post-stratification weights. We did not age adjust the data to the 2000 United States population.

For all demographic variables except income, there was a small number of responses of "don't know/not sure" and "refused"; these responses were set to "missing" and do not contribute to the tabulated frequencies. An exception is for reported annual household income, where the categories of "don't know/not sure" and "refused" are included in the tabulations. For purposes of the tabular analyses, groupings were made for the following categorical variables. Education levels were combined into five categories: less than high school graduation; high

[2] Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System. Technical Information and Data. BRFSS Weighting Formula. Atlanta, GA. Available at http://www.cdc.gov/brfss/technical_infodata/weighting.htm. Last accessed February 17, 2009.

school graduate or General Equivalency Diploma (GED); 1 to 3 years of college; college graduate; and advanced degree. Employment was grouped into three categories: employed for wages or self-employed; retired; and "other" employment status. Persons who were unemployed, homemakers, students, and those unable to work were all combined in the "other" category. Reported annual household income categories were grouped into six categories: less than $15,000; $15,000 to less than $25,000; $25,000 to less than $35,000; $35,000 to less than $50,000; $50,000 to less than $75,000; and $75,000 or more. Respondents who did not know their annual household income or who refused to answer are combined into a seventh category in the stratified tables (Don't know/not sure/refused). Results in the tables are based on the number of respondents that answered a question.

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

Respondents were asked whether they have ever had a sigmoidoscopy or colonoscopy, two colorectal cancer screening tests that are performed with a flexible endoscope. When analyzed together, both tests are referred to as "lower gastrointestinal (GI) endoscopies" or "lower GI endoscopic exams." "Current smokers" were defined as those who smoked at least 100 cigarettes or more in their entire life and, at the time of the survey, smoked cigarettes every day or some days. "Former smokers" were those who smoked at least 100 cigarettes in their life but were not smoking cigarettes at the time of the survey. "Non-smokers" were those who smoked less than 100 cigarettes in their life or who had never smoked. Alcohol consumption was categorized according to use in the past 30 days: no alcohol use (in the past 30 days); low-risk drinking; and high-risk drinking. The definition of binge drinking used in the BCCS questionnaire and analyses is consistent with that used by Healthy People (HP) 2010, which is, consuming five or more drinks on the same occasion at least one day in the past 30 days.[3] For women, low-risk drinking was defined as having no more than seven drinks a week and not engaging in binge drinking. Low-risk drinking for men was defined as having no more than 14 drinks a week and not engaging in binge drinking. High-risk drinking was defined as engaging in binge drinking or consuming more than 14 drinks a week for men and more than seven drinks a week for women. Daily fruit and vegetable intake was calculated by summing the responses from questions about daily or weekly consumption of fruits, fruit juice, leafy salad greens, and vegetables.

[3] U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. Vol.II. Substance Abuse. Washington, DC: U.S. Government Printing Office, November 2000. Available at http://www.healthypeople.gov/document/HTML/Volume2/26Substance.htm. Last accessed February 17, 2009.

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

Survey topic/question	Men	Women	Age category
Oral cancer screening	✔	✔	40 years and older
Breast cancer screening		✔	40 years and older
Cervical cancer screening		✔ (only women who did not report having a hysterectomy)	40 years and older
Colorectal cancer (CRC) screening	✔	✔	50 years and older
Knowledge of CRC screening	✔	✔	40 years and older
Prostate cancer screening	✔		50 years and older
Discussed prostate screening with health professional	✔		40 years and older

Interpreting the Tables

Statistical analyses (population-based numbers and percentages) were performed with weighted data using SAS Version 9.1. Unless otherwise stated, results in the tables of the report have the following values: "N" is the number of people in the sample who responded to a survey question; "n" represents the number of persons in the survey answering "yes" to that question or the number of people who had that characteristic; the "wt %" (weighted percent) is the percent of the Baltimore City 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). Due to small numbers of respondents whose race was other than White or African American (n=36), these groups are not included in stratified analyses by race. However, responses from people of other races are included in analyses of all other stratified variables. Similarly, small numbers of African American men age 45-49 years and older in the survey precluded stratification of prostate cancer screening results for this group. For this reason, the reported prevalence of prostate cancer screening with prostate-specific antigen (PSA) and digital rectal exam (DRE) in the report includes men of all races, age 50 years and older. (In this report, the term "prevalence" is defined as the percentage of the population with a given characteristic at the time of the survey.) Throughout the report, prevalence estimates derived from samples with less than 50 observations are included, 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 the differences in a question (such as a screening test) by a selected characteristic (such as education) 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 "*" indicates a marginally significant difference with a p-value >0.05 and ≤0.1. The symbol "^" shows that the differences were not statistically significant (i.e., p-value > 0.1). If a statistically significant difference is present by a selected characteristic and there are more than two levels of that characteristic (for instance, the five levels of education), a statistically significant difference is present between at least two levels, but not necessarily between every pairwise comparison among the levels. When reviewing the tables, it is important to remember that, while a difference may be "statistically significant," the clinical or practical importance of the difference may not be significant.

Throughout the report, comparisons are made between BCCS results, MCS 2006 results, national targets established in HP 2010, and to other national estimates or baselines (e.g., the NHIS or the BRFSS). Comparisons to HP 2010 have been revised, where necessary, to reflect changes found in the HP 2010 mid-course review (December 2006).[4] HP 2010 targets for smoking, alcohol consumption, and physical activity are intended for the adult population age 18 years and older, and fruit and vegetable consumption targets are based on persons age 2 years and older. These HP 2010 targets are included in this report as a basis for general comparison with the BCCS results, which reflect Baltimore City adults age 40 years and older.

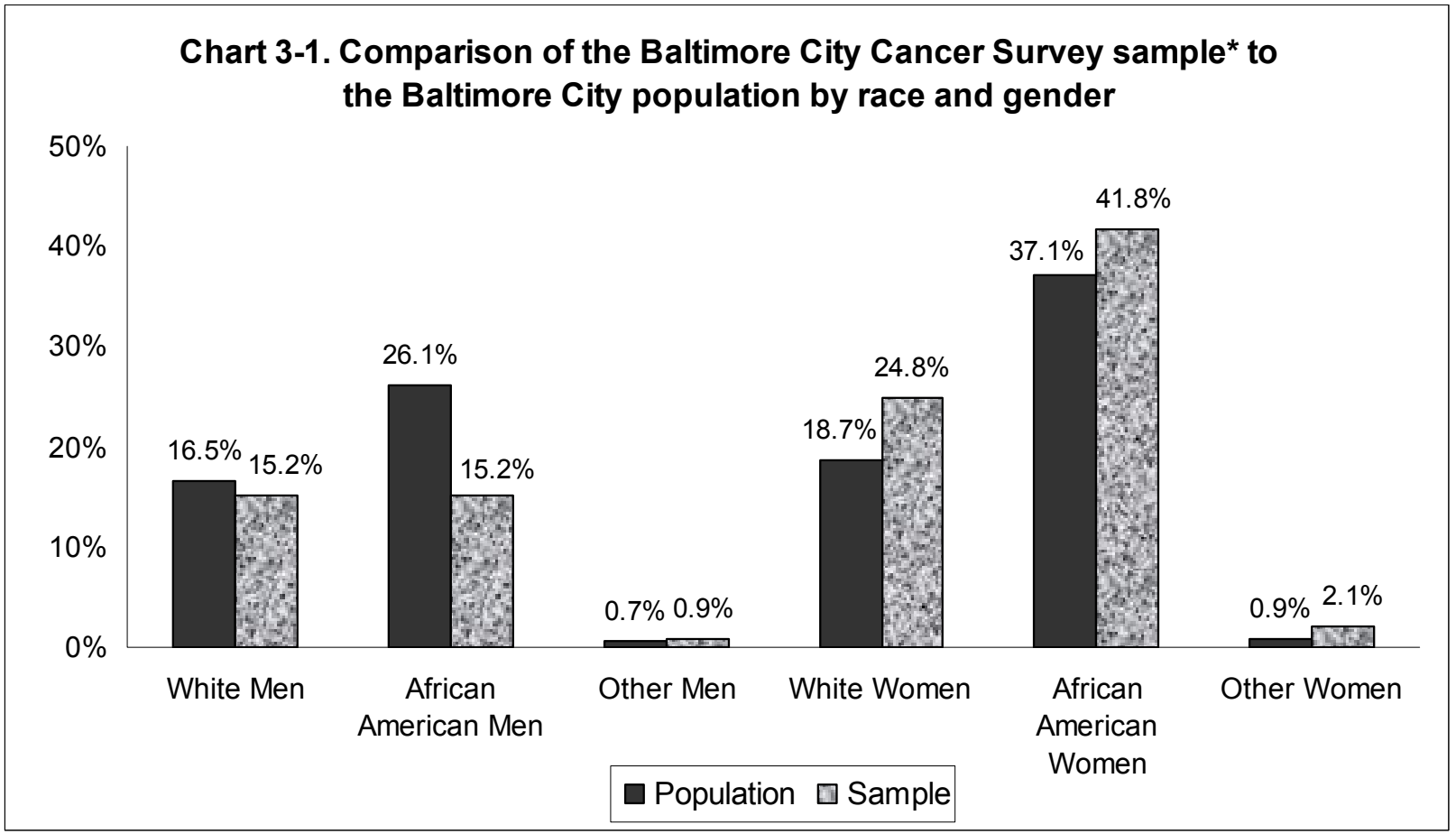
[4] U.S. Department of Health and Human Services. Healthy People 2010 Midcourse review. Washington, DC; 2006. Available at http://www.healthypeople.gov/data/midcourse/default.htm#pubs. Last accessed February 17, 2009.

Chapter 3. The Survey Sample

A total of 1,210 people were interviewed for the survey. The entire records for seven people who refused to give their race were omitted from the dataset for analysis, leaving 1,203 respondents in the analytic dataset. We weighted the sample to match the Baltimore City population by age, race, and gender.

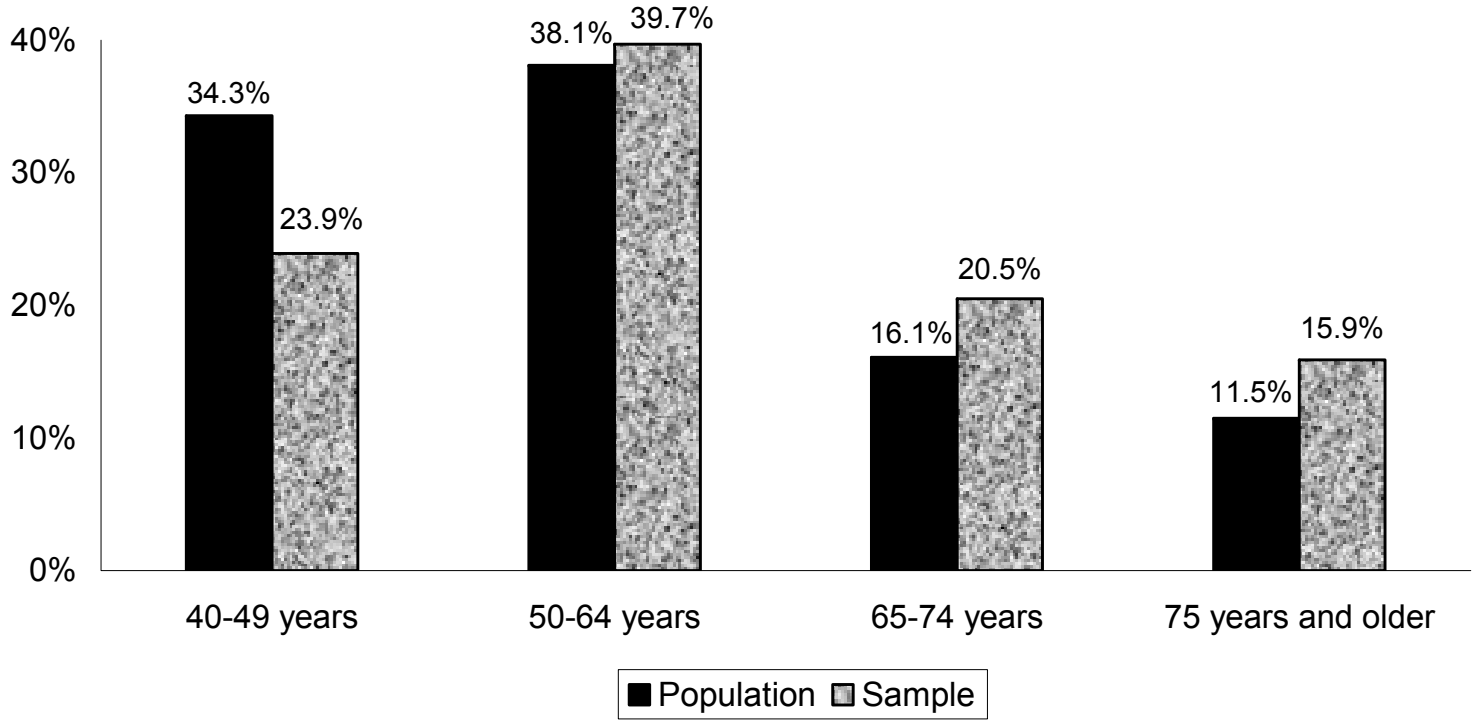
Table 3-1 shows the demographics of the sample and the demographics after being weighted to the Baltimore City population. Whites comprised 40.0% of the sample, Blacks or African Americans made up 57.0%, Asians comprised 0.3%, American Indians or Alaska Natives made up 0.6%, and other responses comprised 2.1% of the sample. The term "African American" is used in the report to represent people who called their race African American or Black. In the analysis, "Other" race refers to people who called their race something different from White or African American, and includes Asian, American Indian or Alaska Native, and any other responses to the race question. Whites were weighted to 35.2% of the Baltimore City population, African Americans were weighted to 63.2%, and people of other races were weighted to 1.6% of the population. Women made up 68.7% of the sample, and are weighted to 56.6%, the percent of women, age 40 years and older, in the Baltimore City population.

Charts 3-1 and 3-2 compare the race/gender groups and the age of the survey respondents to the Baltimore City population that is age 40 years and older, which equals their final weighted percents. African American women made up 41.8% of the sample, whereas they account for 37.1% of the Baltimore City population (Chart 3-1). African American men made up 15.2% of the sample and are weighted to match 26.1% of the population. People age 65 years and older made up 36.4% of the sample, and are weighted to 27.6% of the population (Chart 3-2).



* The Baltimore City Cancer Survey was restricted to persons age 40 years and older. The sample was weighted to the Baltimore City population age 40 years and older.

Chart 3-2. Comparison of the Baltimore City Cancer Survey sample* to the Baltimore City population by age



* The Baltimore City Cancer Survey was restricted to persons age 40 years and older. The sample was weighted to the Baltimore City population age 40 years and older.

TABLE 3-1. DEMOGRAPHICS OF THE SURVEY SAMPLE AGE 40 YEARS AND OLDER, UNWEIGHTED AND WEIGHTED TO THE BALTIMORE CITY POPULATION

	TOTAL			
Selected Characteristic	**Sample N**	**Sample %**	**wt %**	**95% CI**
Total sample (N=1203)				
Gender				
Male	377	31.3%	43.4%	
Female	826	68.7%	56.6%	
Age				
40-49 years	287	23.9%	34.3%	
50-64 years	478	39.7%	38.1%	
65 -74 years	247	20.5%	16.1%	
75 years and older	191	15.9%	11.5%	
Race				
White	481	40.0%	35.2%	
African American or Black	686	57.0%	63.2%	
Asian	4	0.3%	0.2%	
American Indian/Alaska Native	7	0.6%	0.3%	
Other	25	2.1%	1.2%	
Gender and Race				
White male	183	15.2%	16.5%	
African American male	183	15.2%	26.1%	
Other male	11	0.9%	0.7%	
White female	298	24.8%	18.7%	
African American female	503	41.8%	37.1%	
Other female	25	2.1%	0.9%	
Hispanic Ethnicity				
Yes	20	1.7%	1.1%	0.5-1.7%
No	1182	98.3%	98.9%	98.3-99.5%
Marital Status				
Married	380	32.0%	39.8%	36.1-43.5%
Divorced	217	18.3%	16.4%	13.9-19.0%
Widowed	266	22.4%	15.3%	13.2-17.3%
Separated	68	5.7%	5.6%	4.1-7.1%
Never married	242	20.4%	21.0%	18.1-23.9%
Partner of unmarried couple	16	1.3%	1.9%	1.0-2.9%

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

TABLE 3-1. DEMOGRAPHICS OF THE SURVEY SAMPLE AGE 40 YEARS AND OLDER, UNWEIGHTED AND WEIGHTED TO THE BALTIMORE CITY POPULATION

	TOTAL			
Selected Characteristic	**Sample N**	**Sample %**	**wt %**	**95% CI**
Education				
Kindergarten or less	3	0.3%	0.2%	0-0.6%
Grades 1-8	57	4.8%	3.8%	2.7-4.9%
Grades 9-11	171	14.3%	14.4%	11.9-17.0%
High school grad or GED	353	29.5%	31.9%	28.4-35.5%
College 1-3 years	291	24.3%	23.9%	21.0-26.8%
College grad	173	14.4%	14.6%	12.1-17.0%
Master's degree	117	9.8%	8.4%	6.7-10.1%
Doctoral or advanced professional degree	33	2.8%	2.7%	1.4-4.0%
Employment Status				
Employed for Wages	447	37.3%	42.2%	38.6-45.7%
Self Employed	76	6.3%	7.6%	5.4-9.8%
Unemployed > 1 year	41	3.4%	5.5%	3.0-7.9%
Unemployed < 1 year	23	1.9%	2.6%	1.4-3.8%
Homemaker	47	3.9%	3.7%	2.5-4.8%
Student	10	0.8%	0.7%	0.2-1.3%
Retired	437	36.5%	28.9%	26.0-31.8%
Unable to work	117	9.8%	9.0%	7.2-10.8%
Household Income				
Less than $10,000	77	6.4%	6.4%	4.6-8.2%
$10,000-<$15,000	79	6.6%	5.2%	4.0-6.5%
$15,000-<$20,000	127	10.6%	10.0%	7.9-12.0%
$20,000-<$25,000	129	10.7%	10.2%	8.2-12.2%
$25,000-<$35,000	153	12.7%	12.9%	10.5-15.3%
$35,000-<$50,000	161	13.4%	14.3%	11.8-16.8%
$50,000-<$75,000	122	10.1%	10.5%	8.2-12.7%
$75,000 or greater	167	13.9%	16.1%	13.0-19.1%
Don't know/not sure	107	8.9%	8.0%	6.3-9.7%
Refused	81	6.7%	6.4%	4.7-8.1%
Health Insurance				
Yes	1083	90.2%	85.7%	82.6-88.9%
No	118	9.8%	14.3%	11.1-17.4%

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

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

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 CRF Program because of its incidence and mortality in Maryland and because CRC is amenable to prevention through screening and early detection. CRC is the third most common cancer (excluding non-melanoma skin cancer) among men in Maryland, behind prostate and lung and the third most common cancer in women behind female breast and lung cancer. In 2003, there were 2,923 newly diagnosed cases of CRC in Maryland, including 416 cases in Baltimore City. In that year, CRC was the third leading cause of cancer deaths among Maryland men and women, accounting for 1,015 deaths statewide and 158 in Baltimore City. For the period 1999 – 2003, Maryland had the 13th highest mortality rate for CRC among the 50 states and the District of Columbia. This represents a considerable change in ranking since the period 1997 – 2001, when Maryland had the 5th highest CRC mortality rate in the nation. For the period from 1999-2003, incidence and mortality rates for CRC were both statistically significantly higher in Baltimore City than in the state as a whole.[1]

Hidden blood in the stool is often an early warning sign of colorectal disease, including CRC. There are two types of home kits used to detect small amounts of blood in the stool. The older fecal occult blood test (FOBT) is a guaic-based test that detects peroxidase activity found in hemoglobin. However, in addition to detecting human hemoglobin, the FOBT test can also detect animal hemoglobin in the stool (from consumption of red meat), which can potentially lead to false-positive results. A newer, more sensitive test for detecting blood in the stool is the fecal immunochemical test (FIT), which is specific for human hemoglobin. Health care providers (HCPs) often recommend either of these home tests to their patients as an initial CRC screening measure. In the home test, a person smears a small amount of stool on a card for 2 or 3 successive days and mails the card to a laboratory for analysis. The Healthy People (HP) 2010 goal is for 33% of people age 50 years and older to have an FOBT in the past 2 years.[2]

Sigmoidoscopy and colonoscopy are tests in which the large bowel is examined with a narrow, lighted tube inserted in the rectum. During a sigmoidoscopy, only the lower third of the colon (closest to the rectum) is examined; during a colonoscopy the entire colon is examined. These tests are generally referred to as "lower gastrointestinal (GI) endoscopy." HP 2010 has set a goal of increasing to 50% the proportion of adults age 50 years and older who ever had a sigmoidoscopy (from a 1998 baseline of 37%).[3] There is no equivalent HP 2010 target for colonoscopy; however, if a colonoscopy is performed, the procedure meets the HP 2010 goal because a colonoscopy examines much more of the large bowel than a sigmoidoscopy.

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[1] Maryland Department of Health and Mental Hygiene. Cigarette Restitution Fund Program Cancer Report 2008. Baltimore, MD, 2008. Available at http://www.fha.state.md.us/pdf/cancer/2008-CRF_Can_Rpt.pdf. Last accessed February 26, 2009.

[2] U.S. Department of Health and Human Services. Healthy People 2010 Midcourse review. Washington, DC, 2006. Available at http://www.healthypeople.gov/data/midcourse/default.htm#pubs. Last accessed February 17, 2009.

[3] U.S. Department of Health and Human Services. Healthy People 2010, 2nd ed. Understanding and Improving Health; Objectives for Improving Health. Vol. I. Washington, DC: U.S. Government Printing Office, November 2000. Available at http://www.healthypeople.gov/Document/HTML/Volume1/03Cancer.htm. Last accessed February 17, 2009.

For people at average risk for developing CRC, the American Cancer Society (ACS)[4] recommends screening by one of the following modalities beginning at age 50 years:

- Annual FOBT or FIT;
- Flexible sigmoidoscopy every 5 years;
- Sigmoidoscopy every 5 years with annual FOBT or FIT;
- Double contrast barium enema (DCBE) every 5 years; or
- Colonoscopy every 10 years

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

Factors that increase a person's risk of developing CRC include increasing age; a personal history of CRC, benign tumors in the colon called adenomas, endometrial cancer, ovarian cancer, or inflammatory bowel disease; a first-degree relative (FDR; i.e., parent, brother, sister, or child) with CRC or adenomas; or a genetic predisposition such as familial adenomatous polyposis or hereditary nonpolyposis CRC.

All local health departments in Maryland, except Baltimore City, implemented CRC education and screening programs in fiscal year (FY) 2001 with funding from the Cigarette Restitution Fund Program. In FY 2004, Anne Arundel County stopped CRC screening but continued to educate their population. In 2005, the ACS and CareFirst Blue Cross Blue Shield promoted CRC screening to Baltimore City CareFirst members. During this time there was also local media coverage in the Baltimore area promoting CRC screening. In summer 2006, Baltimore City began CRC screening for eligible residents under a demonstration project funded by the CDC.

Familiarity with CRC Screening Tests

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

- Ninety-two percent (92%) of Baltimore City residents age 40 years and older reported knowing there are screening tests for CRC (Table 4-1).
- Without any prompting by the interviewer, 52% were able to name colonoscopy, 8% named FOBT, and 4% identified sigmoidoscopy as CRC screening tests. Fewer respondents named barium enema, digital rectal exam, or radiologic scans as screening tests for CRC. Thirty-six percent (36%) could not name any tests for CRC detection (Table 4-2; respondents could give more than one answer).
- After hearing a description of each test, 73% of Baltimore City residents said they had heard of the home kit for the FOBT, and 85% had heard of sigmoidoscopy or colonoscopy as a means of examining the colon. Familiarity with the tests was

[4] American Cancer Society. Cancer Facts and Figures 2008. Atlanta, GA, 2008. Available at http://www.cancer.org/downloads/STT/2008CAFFfinalsecured.pdf. Last accessed February 17, 2009.

generally higher among those who were female, age 50 years or older, and increased as the level of education increased (Table 4-3).

- Eighty-four percent (84%) said they have seen or heard CRC screening promoted (e.g., in the media, at a health care facility, or some other place; Table 4-4). Those who have heard or seen CRC screening promoted were more likely to be female or African American. White males were least likely to report seeing CRC screening promoted in the media.

Prevalence of CRC Screening

Among Baltimore City residents age 50 years and older,

- 52% have ever performed a home FOBT. Those who were age 65 years and older were significantly more likely to have ever had an FOBT compared to those age 50-64 years (Chart 4-1 and Table 4-5).

According to the ACS, if the home FOBT is the primary test used for CRC screening, the test should be performed each year.

- Twenty-five percent (25%) of Baltimore City residents age 50 years and older said they have performed a home FOBT in the past year (data not shown in tables).

Respondents who had never performed a home FOBT or had not done one in the past year were asked to give the most important reason(s). Persons who had never performed a home FOBT were significantly more likely to say they had no reason or never thought about it, or to say they didn't know they needed the test (compared to persons who had performed the test but who were not up-to-date). Other reasons frequently cited by both groups include (Table 4-6; more than one response could be given per respondent):

- The doctor had not ordered the test or didn't say they needed it
- Respondent reported he/she hadn't had any problems
- The respondent had another type of colorectal exam

The HP 2010 target for having an FOBT in the past 2 years is 33% for adults age 50 years and older.

- Thirty-five percent (35%) of Baltimore City residents in this age group reported having the test within the preceding 2 years (Chart 4-1 and Table 4-5). The prevalence of having an FOBT in the past 2 years was somewhat higher among adults age 65 years and older, compared to those age 50-64 years.

The HP 2010 target for ever having a sigmoidoscopy is 50% for adults age 50 years and older.

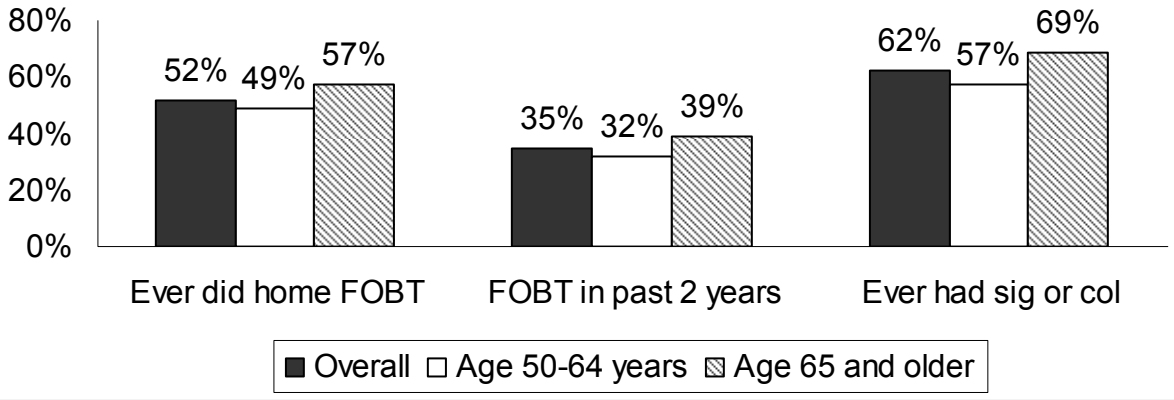
- Sixty-two percent (62%) reported they have ever had a sigmoidoscopy or colonoscopy. Higher levels of screening were seen among people age 65 years and

older, those with a college degree or higher education, and retirees (Chart 4-1 and Table 4-7).

Respondents age 50 years and older who never had a lower GI endoscopy were asked the reason why (Table 4-8; more than one response could be given per respondent). The most frequently cited reasons were:

- No reason or the respondent never thought about it (26%)
- The doctor did not order the test or say it was needed (26%)
- The respondent didn't know the test was needed (17%)
- The respondent has not had any problems (12%)

Chart 4-1. Prevalence of Colorectal Cancer Screening, by Age, Among Adults Age 50 Years and Older Baltimore City Cancer Survey, 2007



Compliance with CRC Screening Guidelines

The following is a summary of CRC screening frequency for city residents age 50 years and older (data not shown in tables). Of those who had CRC testing and knew the type of procedure they had and the time elapsed since the most recent test,

- 25% reported *never* being screened with FOBT, sigmoidoscopy, or colonoscopy;
- 9% have been tested with either FOBT and/or lower GI endoscopy, but are not up-to-date by ACS guidelines;
- 54% had a colonoscopy within the past 10 years (with or without ever having an FOBT);
- 8% were up-to-date with FOBT only;
- 2% were up-to-date with sigmoidoscopy only; and
- 2% had an FOBT in the past year and a sigmoidoscopy in the past 5 years.

Health Care Provider (HCP) Recommendations and CRC Screening

Receiving a recommendation from an HCP is a critical step in having CRC screening performed. The following is a summary of responses to questions about HCP recommendations for CRC screening among Baltimore City residents age 50 years and older:

- Of those who had visited a doctor in the preceding 12 months, only 28% reported receiving a recommendation to perform the home FOBT (Table 4-9).
    - Of these people receiving a recommendation to perform a home FOBT, 72% reported completing the test compared to only 8% who performed the home test in the absence of an HCP recommendation (data not shown in tables).
- Sixty-six percent (66%) of those surveyed indicated that an HCP had ever recommended lower GI endoscopy (Table 4-9). Among these, 85% reported having the exam. Among those who said they did not receive a recommendation from an HCP, only 19% reported having a sigmoidoscopy or colonoscopy (data not shown in tables).

Family History of CRC and Prevalence of Screening Compliance

Having an FDR diagnosed with CRC or adenomas puts one at increased risk for developing CRC and necessitates earlier and possibly more frequent screening with colonoscopy. The following summarizes CRC screening prevalence based on reported family history of CRC (data not shown in tables):

- Ten percent (10%) of adults age 50 years and older reported they had an FDR who had been diagnosed with CRC.
- Among people age 50 years and older who reported having an FDR with CRC, 65% have ever had a colonoscopy compared to 56% of those without an FDR with CRC.

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

Selected Characteristic	N	n	wt %	95% CI	Stat Sig
Total Sample	1197	1107	92%	90-94%	
Gender					^
Male	375	344	90%	86-94%	
Female	822	763	93%	91-95%	
Age					^
40-49 years	285	259	91%	87-95%	
50-64 years	478	451	93%	90-96%	
65 years and older	434	397	92%	89-95%	
Race					**
White	480	458	95%	93-98%	
African American or Black	681	618	90%	87-93%	
Gender and Race					**
White male	183	172	94%	90-98%	
African American male	181	162	87%	81-94%	
White female	297	286	96%	93-99%	
African American female	500	456	92%	89-95%	
Education					**
Less than high school grad	228	196	86%	81-92%	
High school grad or GED	350	323	90%	85-95%	
College 1-3 years	291	272	93%	90-97%	
College grad	173	165	97%	94-99%	
Advanced degree	150	147	98%	95-100%	
Employment Status					^
Employed for wages or self-employed	520	487	92%	89-95%	
Retired	435	401	93%	90-96%	
Other (unemployed, unable to work, homemakers, students)	237	215	90%	86-95%	
Household Income					**
<$15,000	156	139	87%	80-95%	
$15,000-<$25,000	255	235	92%	88-96%	
$25,000-<$35,000	152	133	84%	76-93%	
$35,000-<$50,000	161	152	94%	90-99%	
$50,000-<$75,000	122	116	95%	91-99%	
$75,000 or greater	167	164	99%	97-100%	
Don't know/not sure/refused	184	168	90%	83-96%	

~ Some data missing for education and employment status
** p-value $\leq$ 0.05
* p-value >0.05 - 0.1
^ p--value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

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

Selected Response	wt % (N=1,203)
Colonoscopy	52%
Fecal occult blood test	8%
Sigmoidoscopy	4%
Blood test	3%
Digital rectal exam	3%
MRI/scans/CAT scans	2%
Barium enema	2%
Other	4%
No/nothing	36%

* Question was asked of participants age 40 years or older. More than one response could be given per respondent.

TABLE 4-3. RESPONSES TO QUESTIONS ABOUT AWARENESS OF TESTS FOR COLORECTAL CANCER SCREENING, AMONG ADULTS 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 Sample	1196	912	73%	69-76%		1197	1038	85%	82-88%	
Gender					**					**
Male	373	273	66%	60-73%		375	312	80%	74-85%	
Female	823	639	78%	75-81%		822	726	88%	86-91%	
Age					**					**
40-49 years	285	176	58%	51-66%		287	234	78%	72-85%	
50-64 years	476	394	80%	76-85%		476	430	89%	86-93%	
65 years and older	435	342	80%	76-85%		434	374	86%	83-90%	
Race					**					**
White	477	378	78%	73-83%		479	435	89%	85-93%	
African American or Black	684	511	70%	65-75%		682	573	82%	79-86%	
Gender and Race					**					**
White male	181	137	73%	64-82%		182	158	84%	76-92%	
African American male	182	129	62%	53-72%		182	144	77%	69-84%	
White female	296	241	82%	77-87%		297	277	94%	91-97%	
African American female	502	382	76%	72-80%		500	429	86%	83-89%	
Education					**					**
Less than high school grad	228	160	66%	58-74%		227	162	70%	62-77%	
High school grad or GED	351	262	67%	60-75%		352	307	84%	79-90%	
College 1-3 years	290	224	76%	70-83%		290	257	86%	80-92%	
College grad	173	138	82%	75-88%		173	167	96%	91-100%	
Advanced degree	149	125	81%	73-89%		150	142	94%	89-98%	
Employment Status					**					*
Employed for wages or self-employed	520	395	73%	68-78%		523	459	86%	82-90%	
Retired	435	341	79%	75-84%		432	379	88%	84-91%	
Other (unemployed, unable to work, homemakers, students)	236	174	65%	56-74%		237	198	79%	71-86%	
Household Income					^					**
<$15,000	154	115	67%	57-78%		152	120	73%	63-83%	
$15,000-<$25,000	254	190	74%	67-81%		255	212	84%	79-89%	
$25,000-<$35,000	153	111	70%	61-80%		153	137	84%	75-93%	
$35,000-<$50,000	161	131	79%	70-87%		161	140	85%	78-92%	
$50,000-<$75,000	122	96	78%	69-87%		122	116	94%	88-99%	
$75,000 or greater	166	137	74%	62-86%		167	158	93%	87-99%	
Don't know/not sure/refused	186	132	68%	59-76%		187	155	80%	73-87%	

~ Some data missing for education and employment status
** p-value $\leq$ 0.05
* p-value >0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 4-4. RESPONSES TO QUESTION ABOUT AWARENESS OF MEDIA PROMOTION OF CRC SCREENING, AMONG ADULTS 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				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	1182	1006	84%	81-87%	
Gender					**
Male	369	303	81%	76-86%	
Female	813	703	87%	84-89%	
Age					^
40-49 years	283	239	81%	75-88%	
50-64 years	474	415	87%	84-91%	
65 years and older	425	352	83%	79-87%	
Race					**
White	469	385	78%	73-83%	
African American or Black	677	591	88%	85-91%	
Gender and Race					**
White male	176	134	71%	61-80%	
African American male	182	159	87%	81-93%	
White female	293	251	84%	79-89%	
African American female	495	432	88%	85-92%	
Education					^
Less than high school grad	226	178	79%	72-86%	
High school grad or GED	350	303	85%	80-91%	
College 1-3 years	285	250	87%	83-92%	
College grad	167	145	87%	81-93%	
Advanced degree	149	127	81%	71-91%	
Employment Status					^
Employed for wages or self-employed	517	440	83%	79-88%	
Retired	424	365	86%	82-90%	
Other (unemployed, unable to work, homemakers, students)	237	199	84%	78-89%	
Household Income					^
<$15,000	155	122	79%	71-87%	
$15,000-<$25,000	252	218	87%	83-92%	
$25,000-<$35,000	149	130	84%	74-93%	
$35,000-<$50,000	161	140	89%	83-94%	
$50,000-<$75,000	118	103	82%	71-92%	
$75,000 or greater	163	137	83%	75-91%	
Don't know/not sure/refused	184	156	83%	76-90%	

~ Some data missing for education and employment status
** p-value $\leq$ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

TABLE 4-5. RESPONSES TO QUESTIONS ABOUT HOME FECAL OCCULT BLOOD TESTING, AMONG ADULTS AGE 50 YEARS AND OLDER ~

	Ever had an FOBT					Had an FOBT in the last 2 years				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	913	497	52%	48-56%		913	317	35%	31-39%	
Gender					^					^
Male	291	158	51%	44-58%		291	109	37%	30-43%	
Female	622	339	53%	49-58%		622	208	34%	30-38%	
Age					**					*
50-64 years	477	247	49%	43-54%		477	157	32%	27-38%	
65 years and above	436	250	57%	52-62%		436	160	39%	33-44%	
Race					^					^
White	374	207	53%	47-58%		374	120	32%	27-37%	
African American or Black	519	281	52%	47-58%		519	192	37%	32-42%	
Gender and Race					^					^
White male	145	79	51%	42-60%		145	50	33%	25-42%	
African American male	139	77	52%	42-62%		139	57	39%	30-49%	
White female	229	128	54%	47-61%		229	70	31%	24-38%	
African American female	380	204	53%	47-59%		380	135	36%	31-42%	
Education					^					^
Less than high school grad	202	97	44%	36-52%		202	68	33%	26-41%	
High school grad or GED	266	145	55%	47-62%		266	100	40%	32-47%	
College 1-3 years	210	115	53%	46-61%		210	71	34%	27-42%	
College grad	117	70	58%	47-68%		117	39	34%	24-44%	
Advanced degree	113	67	53%	42-63%		113	37	29%	20-38%	
Employment Status					**					^
Employed for wages or self-employed	314	163	49%	42-55%		314	102	32%	26-39%	
Retired	427	247	58%	53-64%		427	158	39%	34-45%	
Other (unemployed, unable to work, homemakers, students)	169	86	47%	38-55%		169	56	32%	24-40%	
Household Income					^					^
<$15,000	125	67	49%	39-59%		125	50	39%	30-49%	
$15,000-<$25,000	213	107	47%	39-55%		213	69	32%	24-39%	
$25,000-<$35,000	117	59	53%	43-64%		117	46	44%	33-55%	
$35,000-<$50,000	106	68	63%	53-73%		106	42	39%	29-50%	
$50,000-<$75,000	86	50	61%	49-73%		86	27	38%	24-52%	
$75,000 or greater	112	64	50%	39-61%		112	36	30%	20-40%	
Don't know/not sure/refused	154	82	50%	40-59%		154	47	29%	21-37%	

~ Some data missing for education and employment status
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

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

Selected Response	Never performed an FOBT (N=416)	Performed an FOBT more than 1 year before (N=274)
	wt %	wt %
Doctor didn't order it/didn't say I needed it **	27%	40%
No reason, never thought about it **	32%	21%
Didn't need it/ didn't know I needed this type of test **	18%	11%
Haven't had any problems	13%	10%
Had another type of colorectal exam	5%	14%
Never heard of the test	8%	0%
Had blood stool test done at doctor's office	4%	1%
Don't have a doctor	2%	2%
Too expensive/no insurance/cost	1%	2%

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

** Statistically significant difference between groups (p-value $\leq$ 0.05)

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 4-7. PEOPLE REPORTING TO HAVE EVER HAD A SIGMOIDOSCOPY OR COLONOSCOPY, AMONG ADULTS AGE 50 YEARS AND OLDER ~

Selected Characteristic	N	n	wt %	95% CI	Stat Sig
Total Sample	910	582	62%	58-66%	
Gender					^
Male	291	188	60%	53-67%	
Female	619	394	64%	59-68%	
Age					**
50-64 years	477	286	57%	52-63%	
65 years and above	433	296	69%	64-74%	
Race					*
White	374	251	67%	62-72%	
African American or Black	516	321	60%	55-65%	
Gender and Race					^
White male	145	98	66%	58-75%	
African American male	139	86	56%	46-66%	
White female	229	153	67%	60-74%	
African American female	377	235	62%	57-68%	
Education					**
Less than high school grad	199	112	55%	47-63%	
High school grad or GED	266	165	59%	51-66%	
College 1-3 years	211	125	60%	52-67%	
College grad	116	86	75%	67-84%	
Advanced degree	113	92	77%	68-87%	
Employment Status					**
Employed for wages or self-employed	315	195	57%	51-64%	
Retired	424	294	71%	66-76%	
Other (unemployed, unable to work, homemakers, students)	168	92	54%	45-62%	
Household Income					**
<$15,000	124	60	47%	37-57%	
$15,000-<$25,000	212	130	61%	53-69%	
$25,000-<$35,000	117	73	58%	47-69%	
$35,000-<$50,000	107	78	73%	63-82%	
$50,000-<$75,000	86	56	60%	46-74%	
$75,000 or greater	112	93	81%	73-90%	
Don't know/not sure/refused	152	92	57%	47-66%	

~ Some data missing for education and employment status
** p-value $\leq$ 0.05
* p-value > 0.05 - 0.1
^ p-value >0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 4-8. REASONS GIVEN BY ADULTS AGE 50 YEARS AND OLDER FOR NEVER HAVING A SIGMOIDOSCOPY OR COLONOSCOPY FOR COLORECTAL CANCER SCREENING *

Selected Response †	Never had a sigmoidoscopy or colonoscopy (N=328)
	wt %
No reason, never thought about it	26%
Doctor didn't order it/didn't say I needed it	26%
Didn't need/didn't know I needed this type of test	17%
Haven't had any problems	12%
Don't have a doctor	7%
Too painful, unpleasant, embarrassing	5%
Put it off/didn't get around to it	4%
Too expensive/no insurance/cost of test	3%
Didn't want to know if I had cancer	2%
Too young or not old enough	2%
Apathy/not concerned/don't want the test	2%
Don’t know/not sure of the reason	3%

*The responses of 22 participants who have had a colonoscopy or sigmoidoscopy in the past, but were not up-to-date, are excluded from this table because the number of responses is too small for analysis. More than one response could be given per respondent.

† Other reasons cited infrequently include (but were not limited to) having had other tests, health problems, inconvenience/lack of time, not familiar with test, fear, and lack of family history.

TABLE 4-9. PEOPLE REPORTING THAT A HEALTH CARE PROVIDER RECOMMENDED CANCER SCREENING WITH FECAL OCCULT BLOOD TEST, SIGMOIDOSCOPY, OR COLONOSCOPY, AMONG ADULTS AGE 50 YEARS AND OLDER ~

	Health care provider recommended they have a home blood stool test in the last year					Health care provider ever recommended they have sigmoidoscopy or colonoscopy				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	905	253	28%	24-31%		912	605	66%	62-69%	
Gender					**					^
Male	288	96	32%	26-39%		291	193	63%	57-70%	
Female	617	157	24%	21-28%		621	412	68%	63-72%	
Age					^					^
50-64 years	470	132	27%	22-32%		477	316	64%	58-69%	
65 years and older	435	121	29%	24-33%		435	289	69%	64-73%	
Race					^					**
White	370	103	27%	22-32%		374	263	72%	66-77%	
African American or Black	515	143	28%	23-32%		518	332	63%	58-68%	
Gender and Race					^					**
White male	143	50	32%	23-40%		145	102	72%	64-80%	
African American male	138	43	32%	23-42%		139	86	57%	47-67%	
White female	227	53	24%	18-30%		229	161	71%	65-78%	
African American female	370	100	25%	20-29%		379	246	66%	61-72%	
Education					^					**
Less than high school grad	199	49	23%	17-30%		201	108	53%	45-62%	
High school grad or GED	263	72	29%	22-35%		266	169	62%	55-69%	
College 1-3 years	211	56	28%	21-35%		211	138	67%	60-74%	
College grad	114	35	29%	20-39%		116	89	78%	69-86%	
Advanced degree	113	40	31%	22-40%		113	97	84%	75-92%	
Employment Status					^					**
Employed for wages or self-employed	310	88	28%	22-34%		315	215	64%	58-71%	
Retired	426	117	28%	23-33%		425	289	71%	66-75%	
Other (unemployed, unable to work, homemakers, students)	166	48	27%	19-34%		169	100	58%	50-67%	
Household Income					^					**
<$15,000	124	36	27%	19-36%		124	65	52%	42-62%	
$15,000-<$25,000	210	45	20%	14-26%		213	139	66%	59-74%	
$25,000-<$35,000	116	34	34%	23-45%		117	78	66%	56-77%	
$35,000-<$50,000	107	37	28%	19-37%		107	83	78%	69-87%	
$50,000-<$75,000	86	27	33%	19-47%		86	62	64%	51-78%	
$75,000 or greater	111	33	31%	20-41%		112	91	82%	74-90%	
Don't know/not sure/refused	151	41	27%	18-35%		153	87	53%	44-63%	

~ Some data missing for education and employment status
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

Chapter 5. Men's Health: Prostate Cancer Screening

Cancer of the prostate is the most common cancer (excluding non-melanoma skin cancer) among men in Maryland, accounting for 4,201 cases in 2003.[1] In Baltimore City, 506 new cases of prostate cancer were diagnosed in 2003. Prostate cancer is the second leading cause of statewide cancer deaths among men after lung cancer. In 2003, there were 537 deaths from prostate cancer reported in Maryland, including 101 deaths in Baltimore City. Maryland had the 10th highest mortality rate for prostate cancer among the 50 states and the District of Columbia for the period 1999-2003. For the period 1999-2003, both incidence and mortality rates for prostate cancer were statistically significantly higher in Baltimore City than in the state as a whole. In Baltimore City, African American men had statistically significantly higher prostate cancer incidence and mortality rates than Whites for the 5-year period.

Serum prostate-specific antigen (PSA) and the digital rectal exam (DRE) are the two tests most commonly used to screen for prostate cancer. Whether men should be screened for prostate cancer and at what age screening should begin are controversial issues. There is no objective for prostate cancer screening in HP 2010. The ACS recommends that health care providers (HCPs) offer the PSA test and DRE annually beginning at age 50 years to men who have a life expectancy of at least 10 years. For men at high risk (e.g., African Americans and men who have an FDR with prostate cancer), the ACS recommends that testing begin at age 45 years. They also recommend that men with more than one FDR with prostate cancer could begin testing at age 40 years.[2] According to the ACS, prostate cancer occurs more often in African American men than men of other races. African American men with the disease are also more likely to be diagnosed at an advanced stage and more than twice as likely to die of prostate cancer as White men.[3] Prior to 2008, the U.S. Preventive Services Task Force (USPSTF) stated that there was insufficient evidence for or against routine screening for prostate cancer using PSA testing or DRE. In 2008 this was revised and the USPSTF concluded that there is insufficient evidence to assess the balance of harms and benefits of routine screening for prostate cancer in men younger than age 75 years. The USPSTF recommends *against* screening men age 75 years and older for prostate cancer.[4] The USPSTF, ACS, and other groups recommend that a man and his HCP discuss the pros and cons of screening and make a shared decision before a man chooses to undergo testing.

Three hundred seventy-seven (377) men participated in the BCCS. Of these, 319 men (85% of all men) were in the age group for which the ACS recommends that men discuss

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[1] Maryland Department of Health and Mental Hygiene. Cigarette Restitution Fund Program Cancer Report 2008. Baltimore, MD. Available at http://www.fha.state.md.us/pdf/cancer/2008-CRF_Can_Rpt.pdf. Last accessed February 26, 2009.

[2] American Cancer Society. Cancer Screening in the United States, 2008: A Review of Current American Cancer Society Guidelines and Cancer Screening Issues. Available at http://caonline.amcancersoc.org/cgi/content/full/58/3/161. Last accessed February 17, 2009.

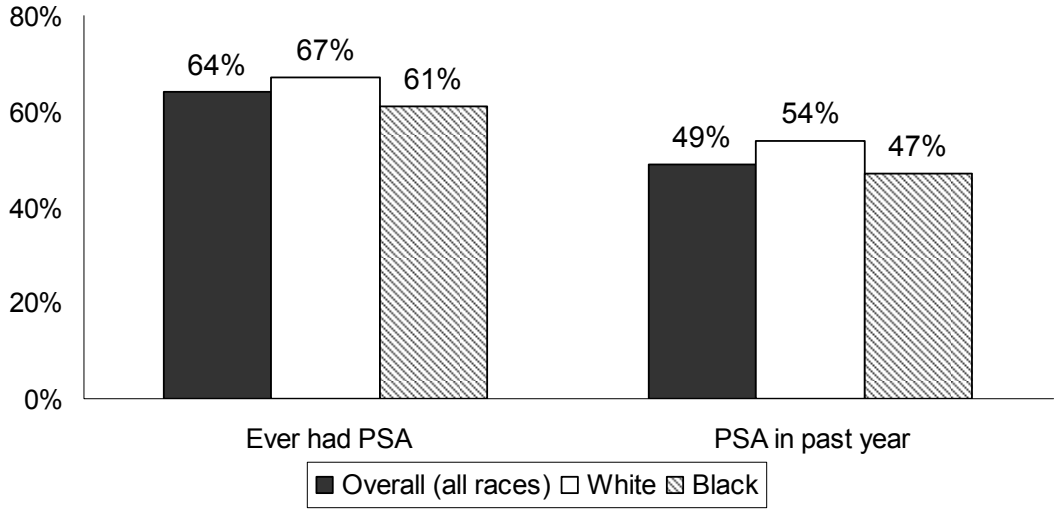
[3] American Cancer Society. Detailed Guide: Prostate Cancer "What are the Risk Factors for Prostate Cancer?" Available at http://www.cancer.org/docroot/CRI/content/CRI_2_4_2X_What_are_the_risk_factors_for_prostate_cancer_36.asp?rnav=cri. Last accessed February 17, 2009.

[4] U.S. Preventive Services Task Force, 2008. Screening for Prostate Cancer. Available at http://www.ahrq.gov/clinic/uspstf/uspsprca.htm. Last accessed February 17, 2009.

prostate cancer screening with their HCPs (African American men age 45 years and older, and all other men age 50 years and older). Because of the small number of African American men age 45-49 years in the BCCS (n=26), the reported prevalence of prostate cancer screening with PSA and DRE in the report and tables includes men of all races who are age 50 years and older. Responses to questions about knowledge of prostate cancer screening and discussions with an HCP are reported for all men age 40 years and older. The following is a summary of prostate cancer screening among men in Baltimore City:

- Seventy-four percent (74%) of men age 40 years and older reported they had heard of the PSA test for prostate cancer screening. Men with less formal education or non-retirees (those who are employed for wages, self-employed, or not currently working), were significantly less likely to have heard of the PSA test (Table 5-1).
- Only about one in five men (21%) were aware that no-cost prostate cancer screening is available to low-income Baltimore City residents who qualify (Table 5-1).
- Sixty-four percent (64%) of men age 50 years and older reported ever having a PSA test. Screening prevalence was significantly lower among younger men (those age 50-59 years compared with those age 60 years and older), men with less formal education, and those who were not retired (Chart 5-1 and Table 5-2). There was no significant difference between African Americans and Whites.
- Only 49% of men age 50 years and older reported having a PSA test in the past year. Prevalence of up-to-date PSA screening was significantly lower among men under age 60 years, those with less formal education, and non-retirees (Chart 5-1 and Table 5-2).
- Men who reported they had never had a PSA test or had a PSA test but it was not in the preceding year were asked the reason. While there were some differences in responses between the two groups (although not statistically significant), the most commonly cited reasons were that the doctor didn't order it; they had no reason or said they never thought about it; they didn't need it or didn't know they needed the test; or they haven't had any problems (Table 5-3).
- Among Baltimore City men age 50 years and older, 85% reported ever having a DRE (Table 5-4). The prevalence was significantly lower among men under age 60 years and men with less education (high school or less compared to college graduate or more).
- Over half (52%) of men age 50 years and older reported having a DRE in the past year (Table 5-4). Younger men (less than 60 years of age) were less likely to have had a DRE in the past year.
- Only 39% of men age 50 years and older reported receiving both a PSA test and DRE within the past year (data not shown in tables). Thirty-seven (37%) had neither test.

Chart 5-1. Prevalence of Prostate-Specific Antigen (PSA) Screening Among Men Age 50 Years and Older, by Race Baltimore City Cancer Survey, 2007



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

- Fifty-eight percent (58%) of men age 40 years and older indicated that a doctor or other HCP had ever discussed prostate cancer screening with them. The prevalence of men reporting such discussions was significantly lower among younger men, those with less formal education, and non-retirees (Table 5-5).

Having an FDR (i.e., father, brother, or son) with prostate cancer places a man at increased risk for developing the disease. The ACS recommends that HCPs offer annual screening beginning at age 45 years for men who have an FDR with prostate cancer and testing as early as age 40 years for men with more than one FDR with prostate cancer.[2]

- Of men age 45 years and older, 15% reported having an FDR who had ever been diagnosed with prostate cancer (data not shown in tables).
- Among these men who reported having an FDR diagnosed with prostate cancer, 71% reported ever having a PSA test. By comparison, only 56% of men without an FDR with prostate cancer reported ever having a PSA test (data not shown in tables).

TABLE 5-1. MEN REPORTING TO HAVE HEARD OF PROSTATE-SPECIFIC ANTIGEN (PSA) TEST AND NO-COST SCREENING PROGRAM, AMONG THOSE AGE 40 YEARS AND OLDER ~

	Ever heard of the PSA test					Aware that Baltimore City has a no-cost prostate cancer screening program				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Male sample	372	291	74%	68-80%		374	85	21%	16-26%	
Age					**					^
40-49 years	84	59	67%	54-81%		84	17	21%	10-31%	
50-59 years	110	79	70%	60-81%		109	20	15%	8-22%	
60-69 years	95	78	82%	74-91%		96	21	21%	12-30%	
70 years and older	83	75	88%	78-98%		85	27	31%	20-42%	
Race					*					^
White	182	149	81%	73-88%		180	38	18%	11-24%	
African American or Black	179	134	70%	61-79%		183	46	23%	16-30%	
Education					**					^
Less than high school grad	72	46	61%	47-74%		74	17	20%	10-30%	
High school grad or GED	101	73	67%	54-81%		102	27	23%	13-33%	
College 1-3 years	84	65	76%	66-87%		84	19	20%	10-29%	
College grad	56	51	92%	85-100%		56	11	21%	6-36%	
Advanced degree	57	54	87%	70-100%		56	10	16%	4-27%	
Employment Status					**					*
Employed for wages or self-employed	178	136	75%	67-83%		178	39	21%	14-29%	
Retired	132	118	88%	81-95%		135	35	26%	18-35%	
Other (unemployed, unable to work, homemakers, students)	62	37	52%	35-70%		61	11	11%	4-19%	
Household Income					^					^
<$15,000	42	30	72%	56-88%		42	10	24%	7-40%	
$15,000-<$25,000	70	51	75%	62-87%		72	17	24%	13-36%	
$25,000-<$35,000	54	44	75%	60-90%		54	14	18%	8-28%	
$35,000-<$50,000	48	32	60%	43-78%		47	8	22%	7-37%	
$50,000-<$75,000	42	35	80%	62-98%		42	7	11%	2-20%	
$75,000 or greater	73	67	84%	66-100%		73	18	19%	7-31%	
Don't know/not sure/refused	43	32	64%	45-83%		44	11	28%	11-45%	

~ Some data missing for education
** p-value $\leq$ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

TABLE 5-2. MEN REPORTING TO HAVE EVER HAD A PROSTATE-SPECIFIC ANTIGEN (PSA) TEST OR TO HAVE HAD A PSA TEST IN THE PAST YEAR, AMONG THOSE AGE 50 YEARS AND OLDER ~

	Ever had a PSA test					Had a PSA test in the past year				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Male sample	271	187	64%	56-71%		271	149	49%	42-56%	
Age					**					**
50-59 years	100	55	48%	37-60%		100	38	32%	22-42%	
60-69 years	91	67	72%	62-83%		91	58	62%	51-73%	
70 years and older	80	65	80%	69-91%		80	53	66%	53-79%	
Race					^					^
White	136	96	67%	58-76%		136	77	54%	44-63%	
African American or Black	128	87	61%	51-72%		128	69	47%	37-57%	
Education					**					**
Less than high school grad	58	31	49%	34-64%		58	26	41%	26-55%	
High school grad or GED	69	41	53%	39-68%		69	33	40%	27-54%	
College 1-3 years	61	43	69%	55-83%		61	32	51%	36-65%	
College grad	36	32	89%	78-100%		36	28	74%	57-91%	
Advanced degree	45	38	78%	63-93%		45	28	57%	41-73%	
Employment Status					**					**
Employed for wages or self-employed	102	70	60%	48-72%		102	53	43%	32-54%	
Retired	124	96	77%	68-86%		124	79	63%	53-73%	
Other (unemployed, unable to work, homemakers, students)	45	21	41%	26-57%		45	17	32%	17-47%	
Household Income					*					*
<$15,000	34	17	46%	27-64%		34	13	32%	16-48%	
$15,000-<$25,000	61	38	62%	47-77%		61	31	46%	31-60%	
$25,000-<$35,000	37	29	73%	55-91%		37	22	57%	38-76%	
$35,000-<$50,000	30	22	67%	49-86%		30	18	54%	35-73%	
$50,000-<$75,000	31	23	67%	43-90%		31	17	43%	23-64%	
$75,000 or greater	48	39	81%	68-93%		48	32	70%	55-84%	
Don't know/not sure/refused	30	19	44%	23-65%		30	16	39%	19-59%	

~ Some data missing for education
** p-value $\leq$ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 5-3. MEN'S RESPONSES TO THE QUESTION "WHAT WAS THE MOST IMPORTANT REASON YOU HAVE NEVER HAD A PROSTATE-SPECIFIC ANTIGEN (PSA) TEST OR HAVE NOT HAD A PSA TEST IN THE PAST 12 MONTHS?" *

Selected Response †	Never had a PSA test (N=84)	Had a PSA test, but not within the past 12 months (N=38)
	wt %	wt %
Doctor didn't order it/didn't say I needed it	40%	22%
No reason, never thought about it	24%	11%
Didn't need it, didn't know I needed the test	18%	20%
Haven't had any problems	14%	12%
Don't have a doctor	8%	3%
Too expensive/no insurance/cost of test	3%	11%
Never heard of test	5%	0%
Put it off/didn't get around to it	3%	6%
Don't go to doctor/haven't been lately	2%	3%

*Analysis includes men who were age 50 years or older who reported they had either never had a PSA test or had not had a PSA test in the past 12 months. More than one response could be given per respondent.

† Other reasons infrequently cited included not wanting to know if cancer was presesnt, unsure if had PSA test, too young/too old, lack of time, and unreliability of test.

TABLE 5-4. MEN REPORTING TO HAVE EVER HAD A DIGITAL RECTAL EXAM (DRE) OR TO HAVE HAD A DRE IN THE PAST YEAR, AMONG THOSE AGE 50 YEARS AND OLDER ~

	Ever had a DRE					Had a DRE in the past year				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Male sample	290	256	85%	79-90%		290	162	52%	45-59%	
Age					**					**
50-59 years	110	92	76%	66-87%		110	51	41%	30-52%	
60-69 years	95	85	91%	85-97%		95	57	58%	47-69%	
70 years and older	85	79	94%	88-99%		85	54	66%	55-78%	
Race					^					^
White	144	125	85%	78-92%		144	88	59%	50-68%	
African American or Black	139	125	85%	77-93%		139	71	48%	39-58%	
Education					**					^
Less than high school grad	63	51	79%	68-91%		63	29	44%	30-59%	
High school grad or GED	74	62	77%	64-90%		74	38	48%	34-62%	
College 1-3 years	67	61	89%	80-98%		67	37	52%	38-65%	
College grad	38	37	99%	96-100%		38	25	63%	45-82%	
Advanced degree	46	43	90%	79-100%		46	33	69%	54-84%	
Employment Status					*					*
Employed for wages or self-employed	112	100	83%	73-93%		112	60	47%	36-58%	
Retired	132	117	91%	86-96%		132	78	61%	52-70%	
Other (unemployed, unable to work, homemakers, students)	46	39	75%	59-91%		46	24	44%	28-60%	
Household Income					**					^
<$15,000	33	25	77%	61-92%		33	14	41%	22-59%	
$15,000-<$25,000	65	58	85%	73-98%		65	34	52%	37-66%	
$25,000-<$35,000	42	37	84%	70-99%		42	19	44%	27-62%	
$35,000-<$50,000	32	28	85%	71-99%		32	18	49%	30-68%	
$50,000-<$75,000	32	31	96%	89-100%		32	19	65%	46-84%	
$75,000 or greater	51	50	98%	95-100%		51	37	67%	52-83%	
Don't know/not sure/refused	35	27	63%	41-84%		35	21	43%	24-62%	

~ Some data missing for education
** p-value $\leq$ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 5-5. MEN REPORTING TO HAVE DISCUSSED PROSTATE CANCER SCREENING WITH A HEALTH CARE PROVIDER, AMONG THOSE AGE 40 YEARS AND OLDER ~

	Has had a health care provider ever discussed prostate cancer screening with you? ~				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Male sample	373	249	58%	52-65%	
Age					**
40-49 years	83	45	44%	31-57%	
50-59 years	110	72	59%	47-70%	
60-69 years	96	63	67%	56-77%	
70 years and older	84	69	82%	71-92%	
Race					^
White	181	123	62%	52-71%	
African American or Black	181	118	56%	47-65%	
Education					**
Less than high school grad	73	42	55%	41-69%	
High school grad or GED	100	55	42%	30-54%	
College 1-3 years	85	59	65%	52-77%	
College grad	56	43	76%	62-89%	
Advanced degree	57	49	77%	59-95%	
Employment Status					**
Employed for wages or self-employed	176	115	57%	48-66%	
Retired	135	104	76%	68-85%	
Other (unemployed, unable to work, homemakers, students)	62	30	37%	22-52%	
Household Income					^
<$25,000	42	23	44%	26-62%	
$25,000-<$35,000	72	45	62%	48-75%	
$35,000-<$50,000	54	39	59%	42-76%	
$50,000-<$75,000	49	33	61%	45-78%	
$75,000 or greater	41	29	58%	38-79%	
Don't know/not sure	71	54	64%	45-83%	
Refused	44	26	54%	36-72%	

~ Some data missing for education
** p-value $\leq$ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

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

Female breast cancer remains the most common reportable cancer and the second leading cause of cancer deaths (after lung cancer) among Maryland women. In 2003, breast cancer accounted for 4,058 newly diagnosed cases and 820 deaths among Maryland women. Among the 50 states and the District of Columbia, Maryland women ranked 6th highest in breast cancer mortality for the period 1999-2003. In Baltimore City, 420 cases of female breast cancer were diagnosed, and 137 women died from breast cancer in 2003. Although the overall incidence of breast cancer is lower in Baltimore City than the state as a whole, the breast cancer mortality rate is statistically significantly higher in Baltimore City. For the period from 1999-2003, African American women in Baltimore City had a significantly lower incidence of breast cancer than White women, but a comparable mortality rate.[1]

In 2003, there were 275 new cases of cervical cancer in Maryland, including 43 cases in Baltimore City. A total of 63 women statewide and 15 Baltimore City women died of cervical cancer in 2003. For the period 1999-2003, Maryland had the 29th highest mortality rate for cervical cancer among the 50 states and the District of Columbia. Cervical cancer incidence and mortality rates in Maryland, as a whole, are higher among African American women than White women.[1]

6.1 Awareness of No-Cost Breast and Cervical Cancer Screening Program

The Maryland DHMH Breast and Cervical Cancer Program (BCCP) is a statewide program that provides breast and cervical cancer screening services to low-income, uninsured or underinsured women age 40 to 64 years. Baltimore City also offers no-cost breast and cervical cancer screening programs for qualified Baltimore City women, through the CRF Program. Female respondents to the BCCS (age 40 years and older) were asked if they were aware of these no-cost breast and cervical cancer screening programs in Baltimore City.

- Only 39% of Baltimore City women age 40 years and older said they had heard of no-cost screening programs. Results did not differ significantly by age, race, education level, employment status, or income level (Table 6-1).

6.2 Breast Cancer Screening

Mammography and clinical breast exam (CBE) are the recommended tests to screen for breast cancer. The USPSTF recommends screening mammography every 1-2 years for women age 40 years and older.[2] The ACS guidelines recommend that women begin having a yearly mammogram and a CBE at age 40 years, and that women between the ages of 20 and 39 years

[1] Maryland Department of Health and Mental Hygiene. Cigarette Restitution Fund Program Cancer Report 2008. Baltimore, MD. Available at http://www.fha.state.md.us/pdf/cancer/2008-CRF_Can_Rpt.pdf. Last accessed February 17, 2009.
[2] U.S. Preventive Services Task Force. Screening for Breast Cancer. February 2002. Available on-line at http://www.ahrq.gov/clinic/uspstf/uspsbrca.htm. Last accessed February 17, 2009.

undergo a CBE every 3 years.[3] In 2007, the ACS began recommending that women at increased risk for breast cancer (based on specific criteria related to family history, genetic tendency, and clinical history) undergo additional breast screening with magnetic resonance imaging (MRI) as an adjunct to mammography.[4]

Among Baltimore City women age 40 years and older,

- 92% reported ever having a mammogram. Although overall prevalence of breast cancer screening is high in this survey sample, the proportion of women ever having a mammogram was statistically significantly lower among those age 40 to 49 years (compared to older age groups; Table 6-2).

For women at average risk for breast cancer, the ACS recommends yearly mammograms for women starting at age 40 years. Among Baltimore City women age 40 years and older,

- 70% reported they had a mammogram in the past year (data not shown in tables).

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

- Eighty-one percent (81%) of women surveyed reported having a mammogram in the past 2 years, surpassing the HP 2010 target of 70% (Table 6-2).
- The prevalence of having a mammogram in the past 2 years was statistically significantly lower among younger women (age 40 to 49 years), women with less formal education, women who were not retired, and women in lower income groups (Table 6-2).
- Women who reported they had never had a mammogram or had a mammogram but it was not in the preceding 2 years were asked why. While there were some differences in responses between the two groups (although not statistically significant), the most frequently cited reasons were they never thought about it or said they had no reason; the doctor didn't order the test or didn't say it was needed; women said they put the test off or didn't get around to it; and many cited the cost of the test or lack of insurance (Table 6-3).

[3] American Cancer Society. Cancer Screening in the United States, 2008: A Review of Current American Cancer Society Guidelines and Cancer Screening Issues. Available at http://caonline.amcancersoc.org/cgi/content/full/58/3/161. Last accessed February 17, 2009.
[4] American Cancer Society. American Cancer Society Guidelines for Breast Screening with MRI as an Adjunct to Mammography. Available at http://caonline.amcancersoc.org/cgi/reprint/57/2/75. Last accessed February 17, 2009.
[5] U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. Understanding and Improving Health; Objectives for Improving Health. Vol. I. Washington, DC: U.S. Government Printing Office, November 2000. http://www.healthypeople.gov/Document/HTML/Volume1/03Cancer.htm. Last accessed February 17, 2009.

Among Baltimore City women age 40 years and older who had seen an HCP in the past year,

- 85% reported that within the past year they had received a recommendation from their HCP to have a mammogram (Table 6-4). Compared to women in other age groups, women age 50 to 64 years were somewhat more likely to report receiving an HCP recommendation to have a mammogram, but this difference was marginally significant. The percent of women reporting receiving recommendations did not differ significantly by race, education level, employment status, or household income level.
- Among the women who reported that an HCP recommended a mammogram in the past year, 77% reported having the test within the past year. Among women who did not receive an HCP recommendation, only 31% reported having a mammogram within the past year (data not shown in tables).

Having an FDR (i.e., mother, sister, or daughter) diagnosed with breast cancer increases a woman's risk for developing breast cancer.

- Sixteen percent (16%) of women age 40 years and older reported they had an FDR who had been diagnosed with breast cancer (data not shown in tables).
- Ninety-five percent (95%) of those reporting an FDR with breast cancer have ever had a mammogram. This figure was not significantly higher than the mammography rate of 91% among women without an FDR with breast cancer.

6.3 Cervical Cancer Screening

The Pap test is the screening test that is recommended for the early detection of pre-malignant and malignant changes of the cervix. The ACS recommends that women begin cervical cancer screening 3 years after becoming sexually active and no later than age 21 years, and that screening be done every year with the regular Pap test or every 2 years using the newer liquid-based Pap test.[3] Beginning at age 30 years, women who have had three negative Pap test results in a row and have no other risk factors may get screened every 2 to 3 years. Also, according to the ACS guidelines, women age 70 years or older who have had three or more normal Pap tests in a row and no abnormal Pap test results in the past 10 years may choose to stop having cervical cancer screening. Screening is not helpful in women who do not have a cervix as a result of a hysterectomy (removal of the uterus and cervix) for a benign condition. Women who have had a hysterectomy but still have an intact cervix are advised to continue being screened according to the guidelines.

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

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

The following section highlights findings related to cervical cancer screening among Baltimore City women age 40 years and older who have not had a hysterectomy.

- Among women age 40 years and older who have an intact cervix, 98% reported ever having a Pap test (Table 6-5). Women with less formal education were less likely to have ever had a Pap test.
- Sixty-eight percent (68%) of women met the ACS guideline of having a Pap test within the past year (data not shown in tables).
- Eighty-six percent (86%) of women age 40 years and older had a Pap test within the past 3 years (Table 6-5), below the HP 2010 target of 90% (for women age 18 years and older). These proportions were significantly lower among older women (age 65 years and older), women with less than a high school education, retirees, and women in lower household income groups. The HP 2010 target was written before the USPSTF recommendations changed in 2003. The USPSTF recommended against routine screening in women older than age 65 years who had recent normal Pap tests and were not otherwise at high risk for cervical cancer. In Baltimore City, among women age 65 and younger who had not had a hysterectomy, 90% reported having a Pap test in the last 3 years.
- Women age 40 years and older who reported not having a Pap test in the past 3 years where asked why. Twenty-seven percent (27%) said they had no reason or never thought about it, 22% said the doctor didn't order the test or didn't say they needed it, 11% said they didn't know they needed the test, and 13% said the test was too expensive or they didn't have insurance (Table 6-6).
- Of women age 40 years and older who have not had a hysterectomy and had seen an HCP in the past year, 75% reported they received a recommendation to have a Pap test from an HCP (Table 6-4). The proportion of women who report having received such a recommendation was significantly lower among elderly women (age 65 years and older), retirees, and women in the lower income groups.
- Among women who said that an HCP had recommended a Pap test in the past year, 84% reported having the test within the past year. In comparison, only 23% of women who did not receive an HCP recommendation reported having a Pap test within the past year (data not shown in tables).

TABLE 6-1. WOMEN REPORTING TO HAVE HEARD OF NO-COST BREAST AND CERVICAL CANCER SCREENING PROGRAM, AMONG THOSE AGE 40 YEARS AND OLDER ~

	Aware that Baltimore City has a no-cost breast and cervical cancer screening program				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Female Sample	818	324	39%	35-42%	
Age					^
40-49 years	202	71	33%	26-41%	
50-64 years	312	127	42%	36-48%	
65 years and older	304	126	40%	34-46%	
Race					^
White	293	117	40%	34-47%	
African American or Black	500	191	37%	32-42%	
Education					^
Less than high school grad	156	66	38%	30-46%	
High school grad or GED	248	100	39%	32-46%	
College 1-3 years	205	80	40%	32-48%	
College grad	115	45	39%	29-49%	
Advanced degree	91	32	35%	23-46%	
Employment Status					^
Employed for wages or self-employed	342	136	40%	34-46%	
Retired	295	115	38%	31-44%	
Other (unemployed, unable to work, homemakers, students)	176	72	39%	31-47%	
Household Income					^
<$15,000	114	44	36%	27-46%	
$15,000-<$25,000	181	70	39%	31-47%	
$25,000-<$35,000	98	43	44%	33-55%	
$35,000-<$50,000	112	47	41%	30-52%	
$50,000-<$75,000	79	29	31%	20-42%	
$75,000 or greater	93	32	35%	24-46%	
Don't know/not sure/refused	141	59	41%	32-50%	

~ Some data missing for education and employment status
** p-value $\leq$ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 6-2. WOMEN'S RESPONSES TO QUESTIONS ABOUT MAMMOGRAM TESTING, AMONG THOSE AGE 40 YEARS AND OLDER ~

	Ever had a mammogram					Had a mammogram in the last 2 years				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Female Sample	826	771	92%	89-94%		826	674	81%	78-84%	
Age					**					**
40-49 years	203	167	80%	73-86%		203	146	72%	64-79%	
50-64 years	312	303	97%	95-99%		312	268	85%	81-90%	
65 years and older	311	301	98%	96-99%		311	260	85%	81-89%	
Race					^					^
White	298	276	93%	89-96%		298	235	80%	75-85%	
African American or Black	503	471	91%	88-94%		503	419	81%	77-85%	
Education					^					**
Less than high school grad	157	145	89%	82-95%		157	115	69%	60-77%	
High school grad or GED	250	228	89%	84-94%		250	199	79%	73-85%	
College 1-3 years	206	196	93%	89-98%		206	179	86%	81-92%	
College grad	117	108	94%	91-98%		117	95	85%	78-91%	
Advanced degree	93	91	97%	92-100%		93	83	87%	77-96%	
Employment Status					**					**
Employed for wages or self-employed	344	317	90%	86-94%		344	280	81%	76-86%	
Retired	301	294	98%	96-100%		301	262	89%	85-92%	
Other (unemployed, unable to work, homemakers, students)	176	155	86%	80-92%		176	127	70%	62-78%	
Household Income					^					**
<$15,000	114	100	83%	75-92%		114	80	66%	56-76%	
$15,000-<$25,000	184	171	90%	84-96%		184	137	73%	65-81%	
$25,000-<$35,000	99	94	91%	82-99%		99	90	85%	76-95%	
$35,000-<$50,000	112	105	92%	85-98%		112	94	84%	77-92%	
$50,000-<$75,000	80	76	94%	88-100%		80	73	90%	83-98%	
$75,000 or greater	94	90	97%	94-100%		94	81	87%	79-95%	
Don't know/not sure/refused	143	135	95%	90-99%		143	119	85%	79-92%	

~ Some data missing for education and employment status
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 6-3. WOMEN'S RESPONSES TO THE QUESTION "WHAT WAS THE MOST IMPORTANT REASON YOU HAVE NEVER HAD/NOT HAD A MAMMOGRAM IN THE PAST 2 YEARS?" *

Selected Response †	Never had a mammogram (N=55)	Had a mammogram, but not within the past 2 years (N=97)
Selected Response	**wt %**	**wt %**
No reason, never thought about it	20%	27%
Doctor didn't order it/didn't say I needed it	14%	14%
Put it off/didn't get around to it	21%	10%
Too expensive/no insurance/cost of test	11%	14%
Didn't need/didn't know I needed this type of test	8%	15%
Haven't had any problems	9%	8%
Too painful, unpleasant, or embarrassing	6%	6%
Does breast self-exam	2%	5%
Lack of time/inconvenience	1%	3%

*Question asked of females age 40 years or older who reported they have never had a mammogram or have not had a mammogram in the past 2 years. More than one response could be given per respondent.

† Other reasons include (but are not limited to) not having a doctor or hasn't been to doctor lately; not wanting to know if had cancer; and having other health problems.

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 6-4. WOMEN REPORTING THAT A HEALTH CARE PROVIDER RECOMMENDED CANCER SCREENING WITH MAMMOGRAM AND PAP TEST, AMONG THOSE AGE 40 YEARS AND OLDER ~

	Health care provider recommended they have a mammogram in the last year					Health care provider recommended they have a Pap test 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 Sample	820	688	85%	82-87%		519	380	75%	71-80%	
Age					*					**
40-49 years	201	162	81%	75-87%		162	129	80%	72-87%	
50-64 years	311	271	89%	85-92%		198	152	78%	71-84%	
65 years and older	308	255	83%	79-88%		159	99	66%	58-74%	
Race					^					^
White	294	241	84%	79-88%		207	151	76%	70-82%	
African American or Black	501	426	85%	81-89%		295	216	75%	69-80%	
Education					^					^
Less than high school grad	152	127	85%	78-91%		84	55	67%	57-78%	
High school grad or GED	249	208	83%	78-89%		164	116	74%	66-81%	
College 1-3 years	206	171	84%	78-89%		122	96	79%	71-88%	
College grad	117	94	85%	78-91%		81	61	81%	73-90%	
Advanced degree	93	85	91%	85-98%		66	50	75%	63-87%	
Employment Status					^					**
Employed for wages or self-employed	343	295	87%	83-91%		241	195	81%	75-87%	
Retired	299	247	83%	79-88%		157	96	63%	55-71%	
Other (unemployed, unable to work, homemakers, students)	173	143	82%	75-89%		117	87	77%	68-85%	
Household Income					^					**
<$15,000	113	88	79%	71-87%		68	44	69%	57-80%	
$15,000-<$25,000	182	148	81%	74-88%		107	73	69%	58-79%	
$25,000-<$35,000	98	84	84%	76-92%		64	42	66%	52-79%	
$35,000-<$50,000	112	96	90%	85-95%		78	59	81%	72-91%	
$50,000-<$75,000	80	70	85%	75-95%		45	39	86%	74-97%	
$75,000 or greater	94	85	90%	83-97%		69	59	87%	78-96%	
Don't know/not sure/refused	141	117	84%	77-90%		88	64	74%	64-84%	

~ Some data missing for education and employment status

** p-value $\leq$ 0.05

* p-value > 0.05 - 0.1

^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 6-5. WOMEN'S RESPONSES TO QUESTIONS ABOUT PAP TESTING, AMONG THOSE AGE 40 YEARS AND OLDER WHO HAVE NOT HAD A HYSTERECTOMY ~

	Ever had a Pap test					Had a Pap test in the last 3 years				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Female Sample	522	508	98%	96-99%		522	432	86%	83-89%	
Age					^					**
40-49 years	163	158	97%	93-100%		163	150	93%	88-97%	
50-64 years	200	197	99%	97-100%		200	174	88%	83-93%	
65 years and older	159	153	97%	95-100%		159	108	72%	64-79%	
Race					^					*
White	208	202	97%	94-100%		208	167	82%	76-88%	
African American or Black	297	291	98%	96-100%		297	252	88%	84-92%	
Education					**					**
Less than high school grad	86	81	94%	88-100%		86	57	69%	58-80%	
High school grad or GED	166	162	98%	97-100%		166	137	86%	81-92%	
College 1-3 years	121	118	97%	92-100%		121	108	91%	85-97%	
College grad	81	79	99%	98-100%		81	71	92%	86-97%	
Advanced degree	66	66	100%	100-100%		66	58	89%	82-97%	
Employment Status					^					**
Employed for wages or self-employed	243	237	97%	95-100%		243	217	91%	88-95%	
Retired	157	151	98%	95-100%		157	115	75%	67-82%	
Other (unemployed, unable to work, homemakers, students)	118	116	98%	95-100%		118	97	86%	80-92%	
Household Income					**					**
<$15,000	68	67	99%	96-100%		68	49	77%	67-87%	
$15,000-<$25,000	109	104	95%	91-100%		109	87	84%	77-91%	
$25,000-<$35,000	64	61	98%	95-100%		64	54	87%	78-95%	
$35,000-<$50,000	78	77	96%	89-100%		78	69	90%	82-98%	
$50,000-<$75,000	45	45	100%	100-100%		45	39	89%	80-98%	
$75,000 or greater	69	69	100%	100-100%		69	66	97%	93-100%	
Don't know/not sure/refused	89	85	97%	94-100%		89	68	79%	70-88%	

~ Some data missing for education and employment status
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

TABLE 6-6. WOMEN'S RESPONSES TO THE QUESTION "WHAT WAS THE MOST IMPORTANT REASON YOU HAVE NOT HAD A PAP TEST IN THE PAST 3 YEARS?" *

Selected Response †	Had a Pap test, but not in the past 3 years (N=76)
	wt %
No reason, never thought about it	27%
Doctor didn't order it/didn't say I needed it	22%
Didn't need/didn't know I needed this type of test	11%
Too expensive/no insurance/cost of test	13%
Haven't had any problems	8%
Don't have a doctor/have been to a doctor	7%
Put it off/didn't get around to it	4%
Too painful, unpleasant, or embarrassing	3%

*The responses of 14 participants who have never had a Pap test are excluded from this table, as the number of responses is too small for analysis. More than one response could be given per respondent.

† Other reasons include (but are not limited to) older age; other health problems; lack of time/inconvenient

Section 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 2003, there were 652 new cases and 131 deaths from oral cancer among Maryland residents; in Baltimore City, 87 new cases and 29 deaths were reported. Among the 50 states and the District of Columbia, Maryland ranked 18th highest for oral cancer mortality during the period 1999-2003. For the period from 1999-2003, the incidence and mortality rates for oral cancer in Baltimore City were statistically significantly higher than statewide rates. In Baltimore City and statewide, men had significantly higher oral cancer incidence and mortality than women. Oral cancer incidence and mortality rates among African Americans and Whites in Baltimore City were comparable.[1]

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

Among Baltimore City adults age 40 years and older,

- 37% reported that they have ever had an oral cancer screening exam. Screening prevalence was significantly lower among African Americans, those with less formal education, those who were not working, and those in lower income groups (Chart 7-1 and Table 7-1).
- 81% reported that a dentist performed their last examination for oral cancer and 8% said the exam was performed by a dental hygienist (data not shown in tables). The remaining exams were performed by other HCPs including physicians or nurse practitioners.

One target of the HP 2010 program is to increase to 20% the proportion of adults age 40 years and older who have had an oral cancer screening exam in the past 12 months.[2] Among Baltimore City adults age 40 years and older,

- 26% reported they had an oral cancer exam within the preceding year (Chart 7-1 and Table 7-1), exceeding the HP 2010 target.

Although prevalence of oral cancer screening in the past year exceeded the HP 2010 target for the overall survey sample, prevalence rates were below the HP 2010 target for the following groups:

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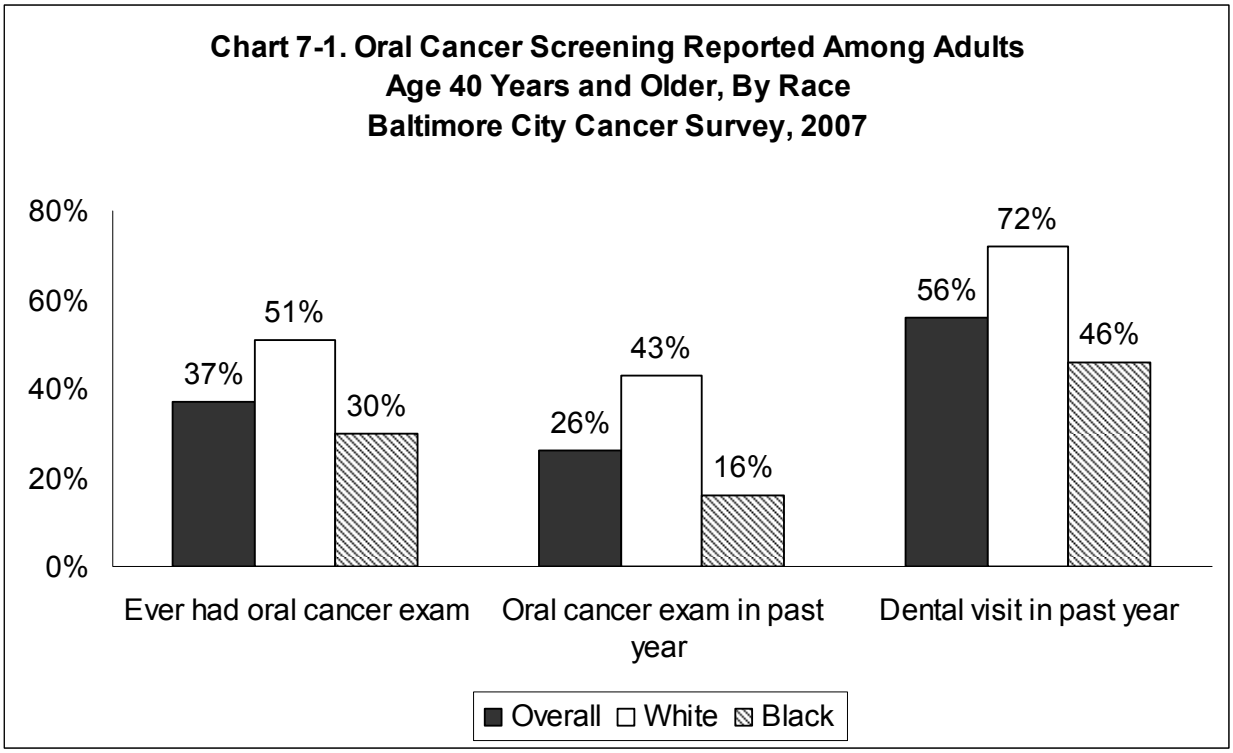
[1] Maryland Department of Health and Mental Hygiene. Cigarette Restitution Fund Program Cancer Report 2008. Baltimore, MD. Available at http://www.fha.state.md.us/pdf/cancer/2008-CRF_Can_Rpt.pdf. Last accessed February 17, 2009.

[2] U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. Understanding and Improving Health; Objectives for Improving Health. Volume II. Oral Health. Washington, DC. November 2000. http://www.healthypeople.gov/document/HTML/Volume2/21Oral.htm. Last accessed February 17, 2009.

- African Americans;
- Persons whose highest education level was high school graduate or less;
- Those who were not working (i.e., unemployed, unable to work, homemakers, and students); and
- Persons whose annual household income was less than $25,000.



HP 2010 has also set a target to increase to 56% the proportion of children and adults (all ages) who use the oral care system each year.[2] Among Baltimore City adults age 40 years and older,

- 56% reported they had visited a dentist in the preceding year for any reason, attaining the HP 2010 target (in this sample population). This percentage was statistically significantly lower among African Americans, respondents with high school education or less, respondents who were not working, and those in the lowest income groups (Table 7-2).

TABLE 7-1. RESPONSES TO QUESTIONS ABOUT ORAL CANCER SCREENING EXAM, AMONG ADULTS AGE 40 YEARS AND OLDER ~

	Ever had an oral cancer screening exam					Had an oral cancer screening exam in the past year				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	1167	452	37%	34-41%		1167	317	26%	23-29%	
Gender					^					^
Male	367	154	37%	31-43%		367	110	27%	22-33%	
Female	800	298	37%	33-41%		800	207	25%	22-28%	
Age					^					^
40-49 years	279	97	33%	26-39%		279	71	25%	19-32%	
50-64 years	466	189	41%	35-46%		466	130	27%	22-31%	
65 years and older	422	166	38%	32-43%		422	116	25%	21-30%	
Race					**					**
White	462	233	51%	45-56%		462	190	43%	37-48%	
African American or Black	670	202	30%	25-34%		670	112	16%	13-20%	
Education					**					**
Less than high school grad	224	51	22%	15-30%		224	23	11%	5-17%	
High school grad or GED	345	113	30%	24-36%		345	70	19%	14-24%	
College 1-3 years	279	103	35%	29-42%		279	67	22%	16-27%	
College grad	165	91	57%	48-66%		165	75	47%	38-57%	
Advanced degree	149	92	61%	50-71%		149	81	52%	42-62%	
Employment Status					**					**
Employed for wages or self-employed	508	223	42%	37-47%		508	163	31%	26-36%	
Retired	421	167	38%	32-43%		421	118	25%	21-30%	
Other (unemployed, unable to work, homemakers, students)	233	61	25%	19-32%		233	35	14%	9-19%	
Household Income					**					**
<$15,000	154	36	22%	14-29%		154	16	7%	3-11%	
$15,000-<$25,000	251	60	25%	18-31%		251	37	15%	10-21%	
$25,000-<$35,000	151	60	37%	27-46%		151	39	22%	15-30%	
$35,000-<$50,000	155	74	40%	31-49%		155	47	26%	18-34%	
$50,000-<$75,000	119	61	47%	36-58%		119	49	39%	28-49%	
$75,000 or greater	161	95	55%	44-66%		161	81	47%	36-57%	
Don't know/not sure/refused	176	66	38%	29-46%		176	48	27%	20-35%	

~ Some data missing for education and employment status

** p-value $\leq$ 0.05

* p-value > 0.05 - 0.1

^ p-value > 0.1

TABLE 7-2. PEOPLE REPORTING DENTAL VISITS DURING THE PAST YEAR, AMONG ADULTS AGE 40 YEARS AND OLDER ~

	TOTAL				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	1193	686	56%	52-59%	
Gender					^
Male	375	215	55%	49-62%	
Female	818	471	56%	52-60%	
Age					^
40-49 years	286	175	60%	52-67%	
50-64 years	476	276	54%	49-59%	
65 years and older	431	235	53%	48-59%	
Race					**
White	477	336	72%	68-77%	
African American or Black	680	326	46%	41-51%	
Education					**
Less than high school grad	228	75	36%	28-44%	
High school grad or GED	348	158	43%	36-50%	
College 1-3 years	289	184	61%	54-68%	
College grad	173	139	77%	69-85%	
Advanced degree	150	129	87%	82-93%	
Employment Status					**
Employed for wages or self-employed	521	338	64%	59-70%	
Retired	430	249	55%	49-60%	
Other (unemployed, unable to work, homemakers, students)	237	97	37%	29-45%	
Household Income					**
<$15,000	156	58	35%	26-45%	
$15,000-<$25,000	253	112	41%	34-48%	
$25,000-<$35,000	153	91	55%	45-65%	
$35,000-<$50,000	160	103	60%	51-70%	
$50,000-<$75,000	122	92	77%	69-86%	
$75,000 or greater	167	134	77%	66-89%	
Don't know/not sure/refused	182	96	50%	41-58%	

~ Some data missing for education and employment status
** p-value $\leq$ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

Section 8. Access to Health Care and Cancer Screening

Access to health care, particularly having health insurance coverage and a usual source of care, is a strong predictor of recent cancer screening.[1] Across all racial and ethnic groups, those who lack health insurance or have inadequate access to care typically have higher cancer incidence and mortality rates, and lower rates of cancer survival.[2] The BCCS included a series of questions asked of all respondents to determine the extent of health care access among Baltimore City residents and its effect on cancer screening prevalence.

Health Care Coverage

Increasing the proportion of people under age 65 years who have health care insurance is one of the goals of HP 2010.[3] The HP 2010 target is to increase the percentage of persons with health insurance coverage from a national baseline of 83% to 100%.

Among Baltimore City adults age 40 years and older,

- 86% reported they have some form of health insurance (Table 8-1). Based on these results, Baltimore City has not yet attained the HP 2010 target for health insurance coverage. Residents less than 65 years of age, African Americans, those with a high school education or less, persons who were not working, and those in lower income groups were significantly less likely to have health insurance.

People who currently have health insurance were asked whether there was a time in the past 12 months when they did not have insurance (Table 8-1).

- Six percent (6%) of those who reported they currently had insurance said they had been without health insurance sometime during the past year. This proportion was highest among adults with less formal education, those who were not working, and those in lower income groups.
- Of the people who do not currently have health insurance, 30% lost their insurance within the past year, 67% have been without insurance for more than 1 year, and 3% reported they have never had health insurance (data not shown in tables).

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

- Thirty-five percent (35%) were familiar with MHIP.

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[1] Smith RA, Cokkinides V, Hammon JE. American Cancer Society Guidelines for Early Detection of Cancer, 2006. CA Cancer J Clin 2006; 56:11-25.
[2] Institute of Medicine. The Unequal Burden of Cancer: An Assessment of NIH Research and Programs for Ethnic Minorities and the Medically Underserved. Washington, D.C., National Academy Press; 1999.
[3] U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. Access to Quality Health Services: Clinical Preventive Care. 2000. Available at http://www.healthypeople.gov/document/HTML/Volume1/01Access.htm. Last accessed February 17, 2009.

- Those younger than age 50 years and those with less formal education were significantly less likely to have heard of MHIP.

Health Care Access

The question was asked about how long it had been since a visit was last made to a doctor for a routine checkup (data not shown in tables).

- Eighty-five percent (85%) of Baltimore City adults age 40 years and older said they had a routine checkup in the past year.
- A significantly higher proportion of women (90%) reported a routine checkup within the past year, compared with men (78%).
- Residents age 65 years and older (95%) were more likely to report having a routine checkup within the past year, compared to those age 40-49 years (77%) and those age 50-65 years (85%).
- A higher proportion of retirees (85%) reported having a routine checkup within the past year compared to those who are employed (82%) or unemployed (78%).
- Eighty-nine percent (89%) of all men and 96% of all women reported having a routine checkup within the past 2 years.

One objective of HP 2010 is to increase to 85% the proportion of persons with a usual HCP.[4] Among Baltimore City adults age 40 years and older (Table 8-3),

- 90% said they have at least one person they think of as their HCP. This proportion was statistically significantly lower among men, residents younger than age 65 years, African Americans, persons with less formal education, and non-retirees.

When asked where they go most often when sick or in need of advice about their health, 59% said they go to a doctor's office or health maintenance organization (HMO), 18% go to a clinic or health center, 10% go to a hospital emergency room, and 7% go to a hospital outpatient department (Table 8-4).

Health Care Access and Cancer Screening

Research has found that people who are uninsured or underinsured are less likely to be screened for cancer.[5, 6] In the BCCS, we sought to determine whether having health insurance was associated with higher prevalence of cancer screening among Baltimore City residents (Table 8-5).

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[4] U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. Understanding and Improving Health; Objectives for Improving Health. Vol. I. Washington, DC: U.S. Government Printing Office, November 2000. http://www.healthypeople.gov/Document/HTML/Volume1/01Access.htm. Last accessed February 17, 2009.
[5] 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.
[6] Ross JS, Bradley EH, Busch SH. Use of health care services by lower-income and higher-income uninsured adults. JAMA. 2006; 295(17) :2027-36.

- For every type of cancer screening except the Pap test, the prevalence of ever having cancer screening was significantly higher among adults with health insurance than among those without insurance.
- Currently insured residents who were without insurance at some point in the past year had a significantly lower prevalence of ever having a sigmoidoscopy or colonoscopy, or a mammogram.
- For every type of screening test except the FOBT and Pap test, the prevalence of ever being screened was significantly lower among those who did not have a primary HCP, compared to those who did.
- Adults who have not had a routine physical exam for 2 years or more had significantly lower prevalence of ever being screened compared to those who reported having a routine physical exam within the preceding 2 years for each screening test, except the Pap test among women.

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

- For every type of cancer screening, the prevalence of being up-to-date was significantly higher among those who had health insurance compared to those who did not, except Pap testing among women.
- Among currently insured residents, those who were without health insurance some time in the past year had a significantly lower prevalence of being up-to-date with mammography and oral cancer screening compared to those who had continuous health insurance coverage throughout the year.
- Adults who did not have a primary HCP had significantly lower prevalence of being up-to-date with every test except FOBT and DRE.
- For all types of cancer screening except FOBT and DRE, the proportion of people who were up-to-date was significantly lower among those who have not had a routine checkup in the past 2 years.

TABLE 8-1. RESPONSES TO QUESTIONS ABOUT HEALTH INSURANCE COVERAGE, AMONG ADULTS AGE 40 YEARS AND OLDER ~

	Currently have health insurance					There was a time they were without health insurance sometime in the last 12 months				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	1201	1083	86%	83-89%		1083	69	6%	4-7%	
Gender					^					^
Male	377	340	83%	77-89%		340	16	4%	2-7%	
Female	824	743	88%	85-91%		743	53	7%	5-9%	
Age					**					^
40-49 years	286	240	78%	70-85%		240	22	7%	4-10%	
50-64 years	477	417	85%	81-89%		417	25	5%	3-7%	
65 years and above	438	426	97%	95-99%		426	22	6%	3-8%	
Race					**					^
White	481	455	94%	92-97%		455	19	4%	2-6%	
African American or Black	685	598	81%	76-85%		598	45	7%	5-9%	
Education					**					**
Less than high school grad	231	202	84%	78-90%		202	22	10%	6-15%	
High school grad or GED	353	295	74%	67-82%		295	24	8%	4-11%	
College 1-3 years	290	265	90%	86-94%		265	16	5%	2-8%	
College grad	173	169	96%	91-100%		169	4	2%	0-4%	
Advanced degree	149	147	98%	94-100%		147	3	2%	0-5%	
Employment Status					**					**
Employed for wages or self-employed	523	467	86%	82-90%		467	26	4%	2-6%	
Retired	436	418	96%	93-98%		418	17	4%	2-7%	
Other (unemployed, unable to work, homemakers, students)	238	195	72%	63-81%		195	25	13%	8-18%	
Household Income					**					**
<$15,000	156	123	78%	70-85%		123	13	12%	5-20%	
$15,000-<$25,000	256	218	78%	71-85%		218	23	8%	4-12%	
$25,000-<$35,000	153	139	83%	74-92%		139	10	8%	3-13%	
$35,000-<$50,000	161	152	91%	83-98%		152	7	5%	1-9%	
$50,000-<$75,000	122	121	99%	96-100%		121	5	3%	0-7%	
$75,000 or greater	167	165	93%	82-100%		165	2	1%	0-3%	
Don't know/not sure/refused	186	165	83%	76-91%		165	9	6%	2-9%	

~ Some data missing for education and employment status

** p-value $\leq$ 0.05

* p-value > 0.05 - 0.1

^ p-value > 0.1

TABLE 8-2. PERSONS REPORTING TO HAVE HEARD OF THE MARYLAND HEALTH INSURANCE PLAN, AMONG ADULTS AGE 40 YEARS AND OLDER ~

	Heard of the Maryland Health Insurance Plan				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	1179	433	35%	31-38%	
Gender					*
Male	368	130	31%	25-37%	
Female	811	303	38%	34-41%	
Age					**
40-49 years	280	92	29%	23-35%	
50-64 years	474	195	41%	36-46%	
65 years and older	425	146	33%	28-38%	
Race					^
White	470	178	36%	31-42%	
African American or Black	673	242	34%	29-38%	
Education					**
Less than high school grad	229	65	26%	19-32%	
High school grad or GED	344	117	29%	24-35%	
College 1-3 years	286	112	40%	33-47%	
College grad	165	71	46%	37-56%	
Advanced degree	150	67	40%	30-49%	
Employment Status					^
Employed for wages or self-employed	513	193	35%	30-40%	
Retired	427	159	37%	32-43%	
Other (unemployed, unable to work, homemakers, students)	235	79	30%	23-37%	
Household Income					^
<$15,000	155	48	27%	19-35%	
$15,000-<$25,000	249	86	34%	27-41%	
$25,000-<$35,000	151	56	34%	24-43%	
$35,000-<$50,000	159	68	43%	34-52%	
$50,000-<$75,000	120	49	36%	26-47%	
$75,000 or greater	164	66	35%	26-44%	
Don't know/not sure/refused	181	60	33%	25-41%	

~ Some data missing for education and employment status
** p-value $\leq$ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 8-3. PERSONS REPORTING TO HAVE A PRIMARY HEALTH CARE PROVIDER, AMONG ADULTS AGE 40 YEARS AND OLDER ~

	Have a primary health care provider				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	1200	1116	90%	87-93%	
Gender					**
Male	376	341	87%	81-92%	
Female	824	775	93%	91-95%	
Age					**
40-49 years	285	255	86%	79-92%	
50-64 years	478	433	88%	84-92%	
65 years and older	437	428	98%	97-100%	
Race					**
White	481	452	94%	92-96%	
African American or Black	683	630	88%	84-92%	
Education					**
Less than high school grad	230	208	88%	82-93%	
High school grad or GED	351	318	84%	77-92%	
College 1-3 years	291	271	93%	90-96%	
College grad	173	166	95%	92-99%	
Advanced degree	150	148	98%	95-100%	
Employment Status					**
Employed for wages or self-employed	522	472	89%	86-93%	
Retired	436	427	98%	97-99%	
Other (unemployed, unable to work, homemakers, students)	237	212	81%	72-91%	
Household Income					^
<$15,000	156	137	88%	82-93%	
$15,000-<$25,000	254	232	88%	83-94%	
$25,000-<$35,000	153	144	90%	83-97%	
$35,000-<$50,000	161	149	91%	85-98%	
$50,000-<$75,000	122	119	95%	87-100%	
$75,000 or greater	167	163	92%	81-100%	
Don't know/not sure/refused	187	172	88%	82-95%	

~ Some data missing for education and employment status
** p-value $\leq$ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

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

Selected Response	wt % (N=1,203)
A doctor's office or HMO	59%
A clinic or health center	18%
A hospital emergency room	10%
A hospital outpatient department	7%
An urgent care center	1%
Some other kind of place	4%

* Only one response could be given per respondent.

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

	Persons reporting to have ever had a fecal occult blood test ~					Persons reporting to have ever had a sigmoidoscopy or colonoscopy ~					Men reporting to have ever had a Prostate Specific Antigen Test #				
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	840	472	55%	51-59%		837	556	66%	62-70%		250	178	67%	60-74%	
No	72	25	28%	17-40%		72	26	29%	18-41%		21	9	36%	13-58%	
Was there a time you were without health insurance in the last 12 months?					^					**					^
Yes	47	25	56%	40-72%		47	21	49%	34-65%		10	5	54%	21-86%	
No	793	447	55%	51-59%		790	535	67%	63-71%		240	173	67%	60-75%	
Do you have one person (or more than one person) you think of as your personal doctor or health care provider?					*					**					**
Yes	858	480	54%	50-58%		855	570	66%	62-70%		252	183	68%	61-75%	
No	54	16	35%	18-53%		54	11	14%	4-24%		18	3	12%	0-26%	
How long has it been since you last visited a doctor for a routine checkup?					**					**					**
Within the past 2 years (less than 2 years)	873	487	54%	50-58%		870	570	65%	61-69%		255	184	68%	62-75%	
2 years or more	33	6	24%	2-45%		33	7	13%	3-23%		14	2	7%	0-17%	

~ Age ≥ 50 years
# Men age ≥50 years
~~ Age ≥ 40 years
#~ Women ≥ 40 years with an intact uterus
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

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

	Women reporting to have ever had a mammogram ~~					Women reporting to have ever had a Pap test #~					Persons reporting to have ever had oral cancer screening ~~				
Selected characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Do you have health insurance?					**					^					**
Yes	743	704	94%	92-96%		460	448	98%	96-99%		1047	427	40%	37-44%	
No	81	65	74%	62-86%		61	59	97%	93-100%		118	24	19%	10-28%	
Was there a time you were without health insurance in the last 12 months?					**					^					^
Yes	53	45	85%	74-95%		34	33	97%	91-100%		68	20	30%	18-43%	
No	690	659	95%	93-97%		426	415	98%	96-100%		979	407	41%	37-45%	
Do you have one person (or more than one person) you think of as your personal doctor or health care provider?					**					^					**
Yes	775	734	94%	91-96%		481	469	98%	96-99%		1081	432	39%	36-43%	
No	49	36	68%	52-85%		39	37	96%	89-100%		83	18	17%	8-26%	
How long has it been since you last visited a doctor for a routine checkup?					**					*					**
Within the past 2 years (less than 2 years)	792	744	92%	90-95%		497	485	98%	96-99%		1105	437	38%	35-42%	
2 years or more	28	21	78%	63-94%		19	17	91%	77-100%		54	12	20%	7-33%	

~ Age ≥ 50 years
# Men age ≥50 years
~~ Age ≥ 40 years
#~ Women ≥ 40 years with an intact uterus
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

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

	† Persons reporting to have had a fecal occult blood test in the past 2 years ~					~* Men reporting to have had a Prostate Specific Antigen Test in the past year #					~* Men reporting to have had a Digital Rectal Exam 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	840	303	37%	34-41%		250	144	54%	46-61		268	156	56%	49-63%	
No	72	14	15%	7-23%		21	5	14%	1-27%		22	6	19%	3-35%	
Was there a time you were without health insurance in the last 12 months?					^					^					^
Yes	47	18	42%	27-58%		10	5	54%	21-86%		11	5	49%	18-80%	
No	793	285	37%	33-41%		240	139	54%	46-61		257	151	57%	49-64%	
Do you have one person (or more than one person) you think of as your personal doctor or health care provider?					^					**					^
Yes	858	307	36%	33-40%		252	146	53%	46-60%		270	157	54%	47-61%	
No	54	9	23%	6-40%		18	2	7%	0-16%		19	5	33%	4-62%	
How long has it been since you last visited a doctor for a routine checkup?					^					**					^
Within the past 2 years (less than 2 years)	873	312	36%	33-40%		255	147	53%	46-60%		274	160	55%	48-62%	
2 years or more	33	3	16%	0-37%		14	1	3%	0-10%		14	2	25%	0-60%	

† HP 2010 objectives
~* American Cancer Society recommendation
~ Age ≥50 years
# Men age 50 years and older
~~ Age ≥40 years
#~ Women ≥40 years with an intact uterus
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

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

	† Women reporting to have had a mammogram in the past 2 years ~~					† Women reporting to have had a Pap test within the past 3 years #~					† Persons reporting to have 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	743	626	84%	81-87%		460	388	87%	84-91%		1047	301	28%	25-32%	
No	81	46	55%	42-68%		61	44	79%	69-90%		118	15	12%	4-19%	
Was there a time you were without health insurance in the last 12 months?					**					^					**
Yes	53	35	68%	54-81%		34	28	84%	72-97%		68	10	14%	5-24%	
No	690	591	86%	83-89%		426	360	88%	84-91%		979	291	29%	26-33%	
Do you have one person (or more than one person) you think of as your personal doctor or health care provider?					**					**					**
Yes	775	658	85%	82-88%		481	406	87%	84-90%		1081	306	28%	24-31%	
No	49	16	34%	18-50%		39	24	70%	55-86%		83	9	8%	2-14%	
How long has it been since you last visited a doctor for a routine checkup?					**					**					**
Within the past 2 years (less than 2 years)	792	659	83%	79-86%		497	423	88%	85-91%		1105	310	27%	24-30%	
2 years or more	28	11	42%	21-63%		19	7	50%	24-76%		54	4	8%	0-16%	

† HP 2010 objectives
~* American Cancer Society recommendation
~ Age ≥50 years
# Men age 50 years and older
~~ Age ≥40 years
#~ Women ≥40 years with an intact uterus
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

Section 9. Lifestyle Factors

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

9.1 Tobacco Use

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

Among Baltimore City residents age 40 years and older,

- 26% report that they currently smoke, 28% have smoked in the past, and 47% have never smoked (Table 9-1).
- Significant differences were found between cigarette smoking status and all of the demographic characteristics, except gender (Table 9-1).
    - The percentage of African Americans who are current smokers is almost twice as high as among White respondents (31% vs. 16%).
    - The prevalence of current smoking among adults age 65 years and older was about half that of younger adults (14% vs. 30%).
    - As education level increased, the percent of current smokers declined. The prevalence of current smoking was almost seven times higher among those with less than a high school education compared to those with advanced degrees (33% vs. 5%).
    - As income level increased, the percent of current smokers decreased.

Smoking Cessation

A number of HP 2010 objectives address smoking cessation. One objective is to increase the proportion of adult smokers age 18 years and older who have been counseled by a physician

[1] U.S. Department of Health and Human Services. The health consequences of smoking: a report of the Surgeon General. Washington, DC; 2004. Available at http://www.cdc.gov/tobacco/sgr/sgr_2004/index.htm. Last accessed February 17, 2009.
[2] Centers for Disease Control and Prevention. Quick Stats: General Information on Alcohol Use and Health. Available at http://www.cdc.gov/alcohol/quickstats/general_info.htm. Last accessed February 17, 2009.
[3] U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. Understanding and Improving Health; Objectives for Improving Health. Vol.II, Tobacco Use. Washington, DC: U.S. Government Printing Office, November 2000. Available at http://www.healthypeople.gov/Document/HTML/Volume2/27Tobacco.htm. Last accessed February 17, 2009.

in the past year about smoking cessation. The specific target for this objective is to increase this proportion from the 2001 baseline of 66% to 72%.[4]

- Among Baltimore City residents age 40 years and older who currently smoke cigarettes, 65% reported having been told to stop smoking by an HCP during the past year (Table 9-2).
- Compared with younger smokers, a significantly higher proportion of those age 50 years and older reported being told to stop smoking (50% of persons age 40 to 49 years, 72% of persons age 50 to 64 years, and 84% of persons age 65 years and older).
- African American smokers were significantly less likely to report having been told to stop smoking than Whites (61% vs. 80%, respectively).

Another HP 2010 objective is to increase the smoking cessation attempts made by adult smokers (i.e., to increase the number of adult smokers who stop smoking for one day or longer because they are trying to quit). The specific HP 2010 target is to increase smoking cessation from a baseline of 41% to a target of 75% (for adults age 18 years and older).[3] In the BCCS, current smokers were asked whether they had stopped smoking at least one day during the previous 12 months because they were trying to quit smoking (Table 9-2).

- Forty-six percent (46%) of all current smokers reported they had at least one smoking cessation attempt within the past 12 months. Women were significantly more likely to attempt smoking cessation than men (53% vs. 37%, respectively).
- Among current smokers who attempted to quit, 81% reported attempting to quit on their own or "cold turkey." A higher proportion of men than women said they tried to quit cold turkey (91% vs. 75%).

Smoking Status and Cancer Screening

Smoking status was examined in relation to the various types of cancer screening, as shown in Table 9-3.

- Current smokers age 50 years and older were significantly less likely than non-smokers (i.e., never and former smokers) to have ever been screened for CRC by FOBT or lower GI endoscopy (sigmoidoscopy or colonoscopy).
- Male smokers age 50 years and older were less likely than non-smokers to have ever had a PSA test or a DRE.
- Current smokers were less likely to have ever been screened for oral cancer than former smokers or never smokers.

[4] U.S. Department of Health and Human Services. Healthy People 2010 Midcourse Review. Washington, DC; 2006. Available at http://www.healthypeople.gov/data/midcourse/html/focusareas/FA01Objectives.htm. Last accessed February 17, 2009.

9.2 Alcohol Consumption

According to current guidelines of the National Institute on Alcohol Abuse and Alcoholism (NIAAA), men are considered to be at high risk for alcohol-related problems if they consume more than 14 drinks per week or engage in binge drinking. Women are considered to be at high risk if they consume more than seven drinks per week or engage in binge drinking.[5] (Note that there are different criteria for men and women because women have proportionally less body water than men, and therefore reach higher blood alcohol levels after drinking the same amount.[5]) The NIAAA has defined binge drinking as a blood alcohol concentration corresponding to consuming five drinks or more for men and four drinks or more for women in a period of about 2 hours.[6] The definition of binge drinking used by HP 2010 to establish a national baseline, based on the 2002 National Survey on Drug Use and Health, is five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past 30 days.[7,8] There is solid evidence that exposure to alcohol is associated with an increased breast and oral cancer risk in a dose-dependent fashion. Alcohol is also associated with esophageal and colorectal cancer.[9]

Two HP 2010 objectives related to alcohol consumption include:

1. To reduce the proportion of adults age 18 years and older who engage in binge drinking from a national baseline in 2002 of 24.3% to a target of 13.4%[7]; and
2. To reduce the proportion of adults age 21 years and older who exceed guidelines for low-risk drinking from 1992 baselines of 72% and 74% for females and males, respectively, to a target of 50% for both sexes.[10]

The BCCS included a series of survey questions (asked of all participants) about the frequency and amount of alcohol consumed during the past 30 days. Three categories of alcohol consumption were defined: non-drinkers, those at low risk for alcohol-related problems, and those at high risk (Table 9-4). For this analysis, high-risk drinking was defined in accordance with NIAAA guidelines as more than 14 drinks in a week for a man and more than seven drinks in a week for a woman, or engaging in binge drinking. We have defined low-risk alcohol

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

[6] National Institute on Alcohol Abuse and Alcoholism, National Advisory Council on Alcohol Abuse and Alcoholism. Summary of Meeting, February 2004. Available at http://www.niaaa.nih.gov/AboutNIAAA/AdvisoryCouncil/CouncilMinutes/min2-04.htm. Last accessed February 17, 2009.

[7] U.S. Department of Health and Human Services. Healthy People 2010 Midcourse Review. Washington, DC; 2006. Available at http://www.healthypeople.gov/data/midcourse/html/focusareas/FA26Objectives.htm. Last accessed February 17, 2009.

[8] U.S. Department of Health and Human Services. National Survey on Drug Use and Health, 2002. Substance Abuse and Mental Health Services Administration (SAMSHA). Washington, DC. Available at http://www.oas.samhsa.gov/nhsda/2k2nsduh/Results/appD.htm. Last accessed February 17, 2009.

[9] National Cancer Institute. PDQ Cancer Information Summaries: Prevention. Available at http://www.cancer.gov/cancertopics/pdq/prevention. Last accessed February 17, 2009.

[10] U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health. Vol.2. Substance Abuse. Washington, DC: U.S. Government Printing Office, November 2000. Available at http://www.healthypeople.gov/document/HTML/Volume2/26Substance.htm. Last accessed February 17, 2009.

drinkers as those who consume some alcohol, but less than high-risk drinkers. The BCCS questionnaire and analyses define binge drinking as consuming five or more drinks on one occasion, consistent with the definition used by HP 2010.

Binge Drinking

- Ten percent (10%) of Baltimore City residents engage in binge drinking (data not shown in tables), which is below the HP 2010 target of 13.4%.
- The highest prevalence of binge drinking was found among males and among residents less than age 65 years (data not shown in tables).

High- and Low-Risk Drinking

Among Baltimore City residents age 40 years and older (Table 9-4),

- 11% were classified as high-risk drinkers, 30% were low-risk drinkers, and 59% were classified as non-drinkers during the previous 30 days. Based on these findings, the HP 2010 target of reducing the proportion of adults who are high-risk drinkers to 50% or less has been reached for this population.
- approximately 15% of men and 8% of women were classified as high-risk drinkers.
- the proportion of high-risk alcohol intake was lowest among those age 65 years and older.
- African Americans were significantly more likely than Whites to be non-drinkers, while Whites were more likely to be low-risk drinkers.
- the prevalence of low-risk drinking increased with increasing education level or increasing income. The percent of high-risk drinkers was fairly stable across education and income groups. Respondents in lower income groups were more likely to be non-drinkers than those in higher income groups.

Alcohol Consumption and Cancer Screening

Level of alcohol consumption was examined in relation to the prevalence of various types of cancer screening. Cancer screening prevalence did not differ significantly by level of alcohol consumption (Table 9-5).

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

		Current smoker			Former smoker			Never smoked			
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	1190	275	26%	22-29%	365	28%	25-31%	550	47%	43-50%	
Gender											^
Male	372	83	26%	20-32%	131	29%	23-34%	158	45%	39-52%	
Female	818	192	25%	22-29%	234	27%	24-30%	392	48%	44-52%	
Age											**
40-49 years	285	84	30%	23-38%	56	17%	12-23%	145	52%	45-60%	
50-64 years	471	126	30%	24-35%	147	28%	24-33%	198	42%	37-47%	
65 years and older	434	65	14%	11-18%	162	39%	34-45%	207	46%	41-52%	
Race											**
White	476	82	16%	12-19%	176	36%	31-41%	218	48%	43-54%	
African American or Black	679	185	31%	27-36%	184	23%	20-27%	310	45%	40-50%	
Education											**
Less than high school grad	230	70	33%	26-41%	63	28%	20-35%	97	39%	32-47%	
High school grad or GED	345	105	35%	28-43%	95	23%	17-28%	145	42%	35-49%	
College 1-3 years	290	66	24%	18-30%	91	29%	23-35%	133	47%	40-54%	
College grad	171	26	15%	8-21%	62	33%	25-41%	83	52%	43-61%	
Advanced degree	149	8	5%	1-8%	53	32%	23-40%	88	64%	54-73%	
Employment Status											**
Employed for wages or self-employed	516	115	23%	19-28%	147	25%	20-29%	254	52%	47-58%	
Retired	434	73	18%	14-22%	166	39%	34-45%	195	43%	38-48%	
Other (unemployed, unable to work, homemakers, students)	236	86	42%	33-51%	52	19%	14-25%	98	39%	31-47%	
Household Income											**
<$15,000	154	48	37%	27-47%	30	16%	10-22%	76	47%	38-57%	
$15,000-<$25,000	255	73	31%	24-38%	73	25%	19-31%	109	44%	37-52%	
$25,000-<$35,000	151	37	25%	17-34%	43	26%	17-34%	71	49%	39-59%	
$35,000-<$50,000	158	38	24%	16-33%	56	33%	24-42%	64	43%	33-52%	
$50,000-<$75,000	120	21	20%	10-30%	35	23%	15-32%	64	57%	46-68%	
$75,000 or greater	166	16	14%	3-25%	62	34%	24-43%	88	52%	42-63%	
Don't know/not sure/refused	186	42	28%	20-36%	66	34%	26-42%	78	38%	30-46%	

~ Some data missing for education and employment status

** p-value $\leq$ 0.05

* p-value > 0.05 - 0.1

^ p-value > 0.1

TABLE 9-2. SMOKING CESSATION DURING THE PAST 12 MONTHS BY DEMOGRAPHIC CHARACTERISTICS, AMONG ADULTS 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	275	198	65%	57-74%		275	135	46%	38-54%		134	102	81%	74-88%	
Gender					^					**					**
Male	83	56	58%	42-74%		83	34	37%	24-51%		33	29	91%	82-100%	
Female	192	142	71%	63-79%		192	101	53%	45-61%		101	73	75%	66-84%	
Age					**					^					^
40-49 years	84	53	50%	35-65%		84	39	40%	26-54%		39	30	82%	69-94%	
50-64 years	126	91	72%	62-82%		126	63	48%	37-59%		62	47	80%	69-90%	
65 years and above	65	54	84%	74-94%		65	33	56%	43-70%		33	25	82%	69-95%	
Race					**					^					^
White	82	66	80%	70-90%		82	30	39%	27-51%		30	22	73%	55-91%	
African American or Black	185	126	61%	50-71%		185	102	48%	38-58%		101	77	82%	75-90%	
Education					**					*					**
Less than high school	70	55	78%	66-90%		70	35	52%	38-66%		35	30	89%	78-99%	
High school grad or GED	105	68	53%	38-67%		105	48	36%	24-48%		48	41	90%	81-98%	
College 1-3 years	66	49	71%	58-85%		66	36	53%	38-69%		35	21	63%	45-81%	
College grad	26	20	75%	55-94%		26	12	55%	32-77%		12	8	83%	64-100%	
Advanced degree	8	6	66%	25-100%		8	4	71%	41-100%		4	2	59%	9-100%	
Employment Status					*					*					*
Employed for wages or self-employed	115	79	63%	51-75%		115	54	47%	35-59%		53	45	89%	82-97%	
Retired	73	59	82%	72-91%		73	40	60%	47-72%		40	29	77%	63-91%	
Other (unemployed, unable to work, homemakers, students)	86	60	59%	42-76%		86	41	37%	24-50%		41	28	71%	56-86%	
Household Income					^					^					^
<$15,000	48	34	71%	55-87%		48	25	45%	28-62%		25	18	78%	62-95%	
$15,000-<$25,000	73	49	62%	49-76%		73	38	49%	35-63%		37	29	81%	68-95%	
$25,000-<$35,000	37	28	66%	45-87%		37	19	52%	32-72%		19	15	82%	63-100%	
$35,000-<$50,000	38	26	66%	45-86%		38	23	69%	53-86%		23	18	80%	62-98%	
$50,000-<$75,000	21	18	70%	36-100%		21	9	40%	13-67%		9	5	71%	42-100%	
$75,000 or greater	16	14	52%	5-98%		16	6	30%	0-62%		6	3	71%	34-100%	
Don't know/not sure/refused	42	29	67%	50-84%		42	15	31%	15-46%		15	14	97%	91-100%	

~ Some data missing for employment status

** p-value $\leq$ 0.05

* p-value > 0.05 - 0.1

^ p-value > 0.1

TABLE 9-3. CANCER SCREENING PRACTICES BY SMOKING STATUS, AMONG ADULTS AGE 40 YEARS AND OLDER

	Current smokers				Former smokers				Never 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)	191	82	41%	33-50%	308	177	56%	50-63%	403	233	55%	50-61%	**
Persons reporting to have ever had a sigmoidoscopy or colonoscopy (Age ≥ 50 years)	191	100	48%	40-57%	304	215	71%	65-77%	404	258	63%	57-68%	**
Men reporting to have ever had a Prostate-Specific Antigen test (Age ≥ 50 years)	62	30	42%	27-56%	103	80	78%	69-87%	102	74	65%	54-77%	**
Men reporting having ever had a digital rectal examination (Age ≥ 50 years)	63	51	72%	57-87%	117	109	94%	89-98%	106	92	84%	75-93%	**
Women reporting to have ever had a mammogram (Age ≥ 40 years)	192	172	88%	82-93%	234	224	94%	91-98%	392	367	92%	89-96%	^
Women reporting to have ever had a Pap test (Age ≥ 40 years with an intact uterus)	124	121	98%	96-100%	152	149	98%	95-100%	241	233	97%	94-100%	^
Persons reporting to have ever had oral cancer screening (Age ≥ 40 years)	268	82	26%	20-32%	351	158	44%	38-50%	535	206	38%	33-44%	**

** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 9-4. ALCOHOL CONSUMPTION DURING THE PAST 30 DAYS BY DEMOGRAPHIC FACTORS, AMONG ADULTS 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 Sample	1187	735	59%	56-63%	342	30%	27-33%	110	11%	8-13%	
Gender											**
Male	368	194	52%	46-59%	121	33%	27-39%	53	15%	10-19%	
Female	819	541	64%	61-68%	221	28%	24-31%	57	8%	6-10%	
Age											**
40-49 years	281	153	53%	46-61%	95	34%	27-41%	33	12%	8-17%	
50-64 years	473	267	55%	49-60%	156	33%	28-38%	50	13%	9-17%	
65 years and above	433	315	73%	68-78%	91	21%	17-25%	27	6%	4-9%	
Race											**
White	475	238	45%	40-51%	183	42%	36-47%	54	13%	9-17%	
African American or Black	676	474	67%	62-71%	150	23%	19-27%	52	10%	7-13%	
Education											**
Less than high school grad	226	173	74%	67-82%	26	11%	6-15%	27	15%	8-22%	
High school grad or GED	349	241	67%	60-73%	77	23%	18-29%	31	10%	6-14%	
College 1-3 years	287	170	55%	48-62%	93	35%	29-42%	24	9%	5-13%	
College grad	173	96	54%	45-63%	70	41%	32-50%	7	5%	0-10%	
Advanced degree	147	50	28%	20-37%	76	55%	45-65%	21	17%	9-25%	
Employment Status											**
Employed for wages or self-employed	515	254	47%	42-53%	201	39%	34-44%	60	14%	9-18%	
Retired	433	307	71%	66-75%	99	23%	18-27%	27	7%	4-10%	
Other (unemployed, unable to work, homemakers, students)	234	171	72%	65-79%	40	18%	12-24%	23	10%	6-15%	
Household Income											**
<$15,000	153	112	73%	64-81%	24	16%	9-23%	17	11%	5-17%	
$15,000-<$25,000	255	186	72%	65-79%	46	19%	13-26%	23	9%	5-13%	
$25,000-<$35,000	152	101	66%	56-75%	40	27%	18-36%	11	8%	3-12%	
$35,000-<$50,000	156	86	54%	45-64%	57	36%	27-46%	13	9%	4-15%	
$50,000-<$75,000	122	57	41%	30-52%	50	46%	34-57%	15	14%	5-23%	
$75,000 or greater	166	61	36%	25-47%	83	46%	36-57%	22	18%	9-26%	
Don't know/not sure/refused	183	132	69%	61-78%	42	23%	16-30%	9	8%	2-14%	

~ Some data missing for education and employment status

Men ≤14 drinks/week or < 5 drinks/occasion
Females ≤7 drinks/week or < 4 drinks/occasion
~ High-risk drinking exceeds these criteria
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 9-5. CANCER SCREENING PRACTICES BY ALCOHOL CONSUMPTION RISK LEVEL DURING THE PAST 30 DAYS, AMONG ADULTS 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)	581	324	54%	49-59%	245	129	51%	44-58%	77	39	46%	32-61%	^
Persons reporting to have ever had a sigmoidoscopy or colonoscopy (Age ≥ 50 years)	578	366	63%	58-68%	245	167	64%	57-71%	77	42	52%	37-66%	^
Men reporting to have ever had a Prostate-Specific Antigen test (Age ≥ 50 years)	144	94	63%	54-72%	86	69	72%	60-84%	36	21	48%	27-69%	^
Men reporting having ever had a digital rectal examination (Age ≥ 50 years)	155	135	84%	77-91%	91	84	88%	79-98%	39	33	79%	60-97%	^
Women reporting having ever had a mammogram (Age ≥ 40 years)	541	507	92%	90-95%	221	205	91%	86-96%	57	53	89%	77-100%	^
Women reporting to have ever had a Pap test (Age ≥ 40 years with an intact uterus)	325	315	98%	96-99%	152	151	98%	94-100%	41	38	94%	85-100%	^
Persons reporting to have ever had oral cancer screening (Age ≥ 40 years)	709	249	35%	31-39%	334	157	42%	36-48%	109	39	35%	23-47%	^

Men ≤14 drinks/week or < 5 drinks/occasion
Females ≤7 drinks/week or < 4 drinks/occasion
~ High-risk drinking exceeds these criteria
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Section 10. Weight, Dietary Practices, and Physical Activity

Overweight and obesity are major health concerns in the United States (U.S.). Scientific evidence has established clear associations between overweight/obesity and the leading causes of morbidity and mortality in the U.S., including cardiovascular disease, cancer, and diabetes.[1, 2] Overweight and obesity are clearly associated with increased risk of developing cancers of the breast (in postmenopausal women), colon, endometrium, esophagus, and kidney. Highly suggestive evidence also indicates that obesity increases risk for cancers of the gallbladder, prostate, ovary, pancreas, thyroid, and cervix, and for multiple myeloma and Hodgkin's lymphoma.[3] One recent study estimates that in the U.S., overweight and obesity could account for as much as 14% of cancer-related deaths in men and 20% of all cancer-related deaths in women.[4]

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

10.1 Body Mass Index (BMI)

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

	BMI range (kg/m^2)
Underweight	Less than 18.5
Healthy	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	30.0 or higher

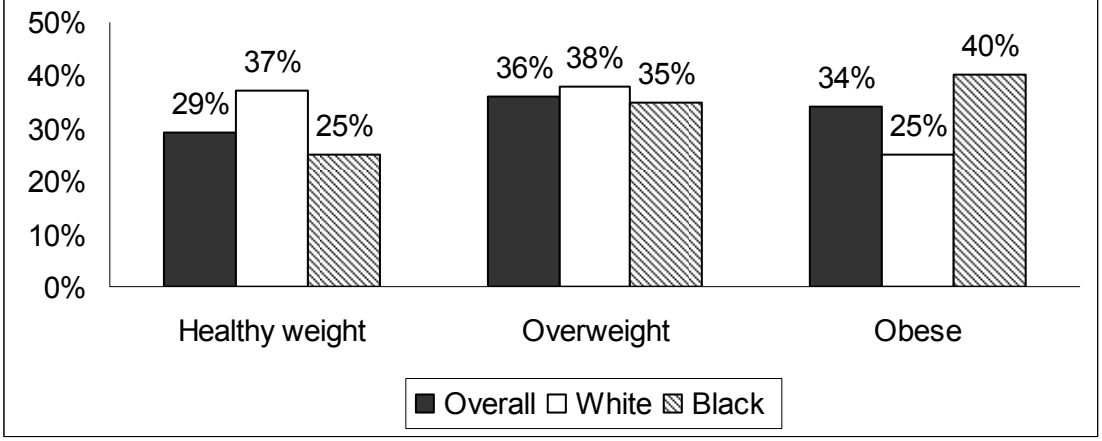
[1] Eyre H, Kahn R, and Robertson RM. Preventing cancer, cardiovascular disease, and diabetes. Diabetes Care 2004; 27(7): 1812-1824.
[2] National Cancer Institute. PDQ Cancer Information Summaries: Prevention. Available at http://www.cancer.gov/cancertopics/pdq/prevention. Last accessed February 17, 2009.
[3] Kushi LH et al. American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention: Reducing the Risk of Cancer with Healthy Food Choices and Physical Activity. CA Cancer J Clin 2006; 56:254-281.
[4] Calle EE et al. Overweight, obesity, and mortality from cancer in a prospectively studied cohort of U.S. adults. N Engl J Med 2003; 348:1625-1638.

Reducing the percentage of Americans who are overweight or obese is among the leading health indicators used by HP 2010. One specific HP 2010 target is to reduce the proportion of American adults age 20 years and older who are obese, from a national baseline of 23% to 15%. Another HP 2010 target is to increase the proportion of adults age 20 years and older that has a healthy weight, from a national baseline of 42% to 60%.[5]

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

- Twenty-nine percent (29%) had a BMI in the "healthy" range, 36% had a BMI in the "overweight" range, and 34% had a BMI in the "obese" range. (Seventeen [17] persons with a BMI in the "underweight" range were excluded from analysis due to small sample size, as were the 27 who did not report a height and/or weight.)
- Seventy percent (70%) of Baltimore City residents age 40 years and older can be considered overweight or obese.

Chart 10-1. Prevalence of Overweight and Obesity Among Persons Age 40 Years and Older, By Race Baltimore City Cancer Survey, 2007



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

[5] U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. Understanding and Improving Health; Objectives for Improving Health. Vol.II, Nutrition and Overweight. Washington, DC: U.S. Government Printing Office, November 2000. Available at http://www.healthypeople.gov/document/HTML/Volume2/19Nutrition.htm. Last accessed February 17, 2009.

- Although the prevalence of overweight was significantly higher among men (42% compared to 31% for women), the prevalence of obesity was significantly higher among women (40% vs. 28%).
- African Americans had a significantly greater percentage with a BMI in the obese range than did Whites (40% vs. 25%).
- The proportion of persons in the healthy BMI range generally increased with higher levels of formal education. The prevalence of obesity was significantly higher among those with less than a college degree (37-40%).

BCCS participants were asked whether, at the time of the survey, they were trying to either lose weight or keep from gaining weight, and if so, what method they were using.

Among residents age 40 years and older,

- 39% said they are trying to lose weight (Table 10-2).
- of those trying to lose weight, 24% are following a diet plan and 63% are using physical activity.
- about one-quarter (24%) said that in the past 12 months a health professional had advised them to lose weight (data not shown in tables). Of those with a BMI in the obese range, only 51% reported that a health professional had advised them to lose weight.

10.2 Dietary Practices

Epidemiological studies have shown that eating a diet high in vegetables and fruits and low in animal fat and meat reduces the risk of some of the most common types of cancer.[1,2] Although questions remain about the role of nutrition in cancer, current recommendations for overall health are to consume a diet that includes at least five servings of vegetables and fruits each day, to choose whole grain foods, and to limit consumption of saturated fats, alcohol, and excess calories.[6]

Fruit and Vegetable Consumption

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

1. To increase the proportion of persons age 2 years and older who consume at least two daily servings of fruit from a national baseline of 28% to 75%; and
2. To increase the proportion of those who consume at least three daily servings of vegetables from 3% to 50%.[5]

In the BCCS, Baltimore City residents were asked about their average daily consumption of a variety of fruits and vegetables. Using these survey results, we estimated the number of

[6] U.S. Department of Health and Human Services (HHS) and U.S. Department of Agriculture (USDA). Dietary Guidelines for Americans 2005. Available at http://www.healthierus.gov/dietaryguidelines. Last accessed February 17, 2009.

daily servings of fruits and vegetables by summing the responses from specific questions about consumption of fruits, fruit juice, leafy salad greens, and vegetables (other than potatoes). The results show that Baltimore City residents do not yet meet the HP 2010 targets for either fruit or vegetable consumption. Only 57% of residents reported eating two or more servings of fruit (compared to HP 2010 target of 75%) and only 29% reported that they consume three or more daily servings of vegetables (compared to target of 50%).

The benefits of these objectives are encompassed in the goal of the CDC National 5-A-Day for Better Health Program, namely to increase the consumption of fruits and vegetables in the U.S. to five to nine servings every day. This program strives to inform Americans that eating fruits and vegetables can improve their health and reduce the risk of cancer and various cardiovascular diseases.[7] Table 10-3 presents the findings for Baltimore City residents eating at least five servings of fruits and vegetables daily.

- Overall, 39% reported eating five or more servings of fruits and vegetables per day.
- More women than men reported eating at least five servings per day (44% vs. 33%, respectively).
- As education level increased, adherence to the recommendation also generally increased, ranging from 35% of those with less than high school education to 54% of those possessing an advanced degree.
- Adherence to the recommendation to eat at least five servings of fruits and vegetables per day did not differ significantly by race or income level.

Red Meat Consumption

One of the primary dietary concerns in the U.S. is consuming too much saturated fat and total fat. (Cheese and beef are the leading sources of saturated fat in the American diet, comprising almost one-fourth of total saturated fat consumed.[6]) Large amounts of saturated fat in the diet contribute to the risk of heart disease, and high levels of meat consumption may increase the risk of cancer of the colon and rectum,[8,9] stomach,[10] and pancreas.[11,12] Both the *Dietary Guidelines for Americans*[6] and the National Cholesterol Education Program[13] recommend a diet that contains less than 10% of calories from saturated fat and no more than 30% of calories from total fat. A related goal of the HP 2010 initiative is to increase the

[7] Centers for Disease Control and Prevention. National 5-A-Day for Better Health Program. Available at http://www.5aday.gov. Last accessed February 17, 2009.
[8] Chao A, Thun MJ et al. Meat consumption and risk of colorectal cancer. JAMA 2005; 293(2): 172-82.
[9] Larson S, Wolk A. Meat consumption and risk of colorectal cancer: A meta-analysis of prospective studies. Int J Cancer 2006; 119(11) :2657-2664.
[10] Gonzalez CA et al. Meat intake and risk of stomach and esophageal adenocarcinoma within the European Prospective Investigation Into Cancer and Nutrition (EPIC). J Natl Cancer Inst. 2006; 98(5):345-54.
[11] 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.
[12] Nothlings U, Wilkens LR et al. Meat and fat intake as risk factors for pancreatic cancer: the multiethnic cohort study. J Natl Cancer Inst. 2005; 97(19): 1458-65.
[13] National Institutes of Health. National Cholesterol Education Program. Available at http://www.nhlbi.nih.gov/guidelines/cholesterol. Last accessed February 17, 2009.

proportion of persons age 2 years and older who consume less than 10% of calories from saturated fat.[5]

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

- Overall, 28% of residents age 40 years and older eat one or fewer servings of meat a week; 37% eat two to six servings of meat per week; and 35% report eating seven or more servings of meat weekly.
- A significantly higher proportion of African Americans (39%) reported eating seven or more servings of meat per week, compared to White residents (29%).

10.3 Physical Activity

In addition to known benefits in reducing cardiovascular disease risk, physical activity may also reduce the risk of developing several types of cancer, including cancers of the breast,[2,14,15] colon,[2,16,17,18] prostate (aggressive cancer),[19] and endometrium.[20] Physical activity is one of the leading health indicators used by HP 2010. Two related HP 2010 goals are

1. To increase the proportion of adults age 18 years and older who engage in moderate physical activity for at least 30 minutes per day, 5 or more days per week, or vigorous physical activity for at least 20 minutes per day, 3 or more days per week to a target of 50%[21]; and
2. To increase the proportion of adults who engage in vigorous physical activity 3 or more days per week for at least 20 minutes per occasion to a target of 30%.[21]

Moderate physical activity causes small increases in breathing and/or heart rate (e.g., brisk walking, bicycling, vacuuming, gardening). Vigorous physical activity includes activities such as running, aerobics, heavy yard work, or other activities that cause large increases in

[14] McTiernan A et al. Recreational physical activity and the risk of breast cancer in postmenopausal women: The Women's Health Initiative Cohort Study. JAMA 2003; 290(10): 1331-6.
[15] Patel AV et al. Recreational physical activity and risk of postmenopausal breast cancer in a large cohort of US women. Cancer Causes Control. 2003; 14(6):519-529.
[16] Samad AK et al. A meta-analysis of the association of physical activity with reduced risk of colorectal cancer. Colorectal Dis. 2005; 7(3): 204-13.
[17] Martinez ME et al. Leisure-time physical activity, body size, and colon cancer in women. Nurses' Health Study Research Group. J Natl Cancer Inst 1997; 89:948-955.
[18] Colditz GA et al. Physical activity and reduced risk of colon cancer: implications for prevention. Cancer Causes Control 1997; 8:649-667.
[19] Patel AV et al. Recreational physical activity and risk of prostate cancer in a large cohort of US men. Cancer Epidemiol Biomarkers Prev 2005; 14(1):275-9.
[20] Friberg E et al. Physical activity and risk of endometrial cancer: a population-based prospective cohort study. Cancer Epidemiol Biomarkers Prev 2006; 15(11):2136-40.
[21] U.S. Department of Health and Human Services. Healthy People 2010 Midcourse Review. Washington, DC; 2006. Available at http://www.healthypeople.gov/data/midcourse/default.htm#pubs. Last accessed February 17, 2009.

breathing or heart rate. Baltimore City residents age 40 years and older were asked about the frequency and duration of their activity in a typical week:

- Overall, 31% reported that they engage in moderate physical activity for at least 30 minutes per day for 5-7 days per week (Table 10-5).
- Only 17% reported that they engage in vigorous physical activity for 3 or more days per week, 20 or more minutes per occasion, well below the HP 2010 target of 30%. A significantly higher proportion of men than women (20% vs. 14%) and younger residents (24% of persons age 40-49 years, compared to 16% of persons age 50-64 years and 10% of persons age 65 and older) engage in vigorous physical activity (Table 10-6).

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

- Forty percent (40%) reported they engage in either moderate or vigorous activity. This proportion is below the HP 2010 target of 50% for the proportion of adults who engage in either moderate or vigorous physical activity.

Baltimore City residents who did not engage in either 20 minutes of vigorous activity 3 or more days per week or at least 30 minutes of moderate physical activity 5 or more days per week were asked the main reason why they were not physically active (data not shown in tables):

- Thirty-nine percent (39%) reported a physical disability or other health limitation.
- Twenty-eight percent (28%) reported a lack of motivation.
- Twenty-three percent (23%) reported a lack of time.

One objective of HP 2010 is to increase the proportion of people who have been counseled by a physician in the past year about physical activity or exercise, from a 2001 baseline of 45% to a target of 54%.[22] All participants were asked whether, in the past year, a doctor or other health care professional had recommended that they begin or continue to do exercise or physical activity (data not shown in tables). Forty percent (40%) said that exercise/activity had been recommended to them.

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

Undergoing cancer screening tests can be thought of as a healthy behavior, much like engaging in physical activity or eating a balanced diet. Physical activity, diet, and BMI were examined in relation to each of the cancer screening questions to see whether people who practice other healthy behaviors are also more likely to undergo cancer screening (Table 10-8).

[22] U.S. Department of Health and Human Services. Healthy People 2010 Midcourse review. Available at http://www.healthypeople.gov/data/midcourse/html/focusareas/FA01Objectives.htm. Last accessed February 17, 2009.

- The prevalence of oral cancer screening was significantly higher among those who engaged in vigorous physical activity, as well as among those with higher daily intake of fruit and vegetable servings.
- The prevalence of CRC screening by FOBT and oral cancer screening was somewhat lower among those with the highest frequency of red meat consumption.
- Residents who had a BMI in the overweight or obese range had somewhat higher prevalence of ever having CRC screening by FOBT, compared with those who were at a healthy weight. No difference in screening prevalence by weight was seen for lower GI endoscopy.

TABLE 10-1. BODY MASS INDEX BY DEMOGRAPHIC CHARACTERISTICS, AMONG ADULTS 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 Sample	1159	350	29%	26-33%	404	36%	32-40%	405	34%	31-38%	
Gender											**
Male	368	117	30%	24-36%	148	42%	35-49%	103	28%	22-33%	
Female	791	233	29%	25-32%	256	31%	28-35%	302	40%	36-44%	
Age											^
40-49 years	276	88	31%	24-38%	84	34%	27-42%	104	35%	28-42%	
50-64 years	462	125	27%	22-31%	158	35%	29-40%	179	39%	33-44%	
65 years and older	421	137	31%	26-36%	162	40%	35-46%	122	28%	23-33%	
Race											**
White	467	174	37%	32-42%	178	38%	33-44%	115	25%	21-30%	
African American or Black	660	168	25%	21-30%	210	35%	30-39%	282	40%	35-45%	
Education											**
Less than high school grad	225	61	27%	20-34%	81	35%	28-43%	83	37%	30-45%	
High school grad or GED	335	81	26%	20-32%	118	36%	29-44%	136	38%	31-44%	
College 1-3 years	281	82	26%	20-32%	88	34%	27-41%	111	40%	33-47%	
College grad	167	60	36%	27-45%	61	39%	30-48%	46	25%	18-33%	
Advanced degree	146	64	42%	32-52%	54	38%	28-48%	28	20%	12-28%	
Employment Status											^
Employed for wages or self-employed	503	163	32%	27-37%	171	34%	29-39%	169	34%	29-39%	
Retired	420	132	30%	25-34%	155	38%	33-43%	133	32%	27-38%	
Other (unemployed, unable to work, homemakers, students)	231	53	23%	16-29%	77	38%	29-47%	101	39%	31-47%	
Household Income											*
<$15,000	149	37	23%	15-31%	54	39%	29-49%	58	38%	28-47%	
$15,000-<$25,000	244	76	32%	25-40%	74	29%	22-35%	94	39%	31-46%	
$25,000-<$35,000	149	33	26%	16-36%	61	40%	30-49%	55	34%	25-43%	
$35,000-<$50,000	157	48	28%	20-36%	53	30%	21-38%	56	43%	33-52%	
$50,000-<$75,000	119	35	24%	16-33%	36	37%	25-49%	48	39%	28-50%	
$75,000 or greater	163	64	35%	25-44%	55	40%	28-51%	44	26%	17-34%	
Don't know/not sure/refused	178	57	33%	25-41%	71	42%	33-51%	50	25%	18-32%	

~ Some data missing for education and employment status

** p-value ≤ 0.05

* p-value > 0.05 - 0.1

^ p-value > 0.1

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

	Trying to lose weight					Following a particular diet plan					Using physical exercise to lose weight				
Selected Characteristic	**N**	**n**	**%**	**95% CI**	**Stat Sig**	**N**	**n**	**%**	**95% CI**	**Stat Sig**	**N**	**n**	**%**	**95% CI**	**Stat Sig**
Total Population	1202	487	39%	36-42%		487	108	24%	20-29%		487	294	63%	58-68%	
Gender					**					^					^
Male	377	125	32%	26-37%		125	30	27%	17-37%		125	78	68%	59-77%	
Female	825	362	45%	41-49%		362	78	23%	18-28%		362	216	61%	55-67%	
Age					**					*					**
40-49 years	286	131	42%	34-49%		131	37	31%	21-41%		131	95	73%	64-82%	
50-64 years	478	214	43%	37-48%		214	48	22%	16-29%		214	136	66%	59-73%	
65 years and above	438	142	31%	26-36%		142	23	17%	10-24%		142	63	43%	34-52%	
Race					^					^					^
White	481	190	39%	34-44%		190	50	26%	19-33%		190	118	65%	57-72%	
African American or Black	685	280	39%	34-43%		280	55	24%	17-30%		280	165	63%	56-70%	
Education					*					^					^
Less than high school	231	69	31%	23-38%		69	11	20%	8-31%		69	36	56%	42-70%	
High school grad or GED	353	140	38%	31-44%		140	35	31%	21-42%		140	83	63%	53-72%	
College 1-3 years	290	133	45%	39-52%		133	34	23%	15-31%		133	75	59%	50-69%	
College grad	173	71	38%	29-46%		71	11	18%	7-28%		71	49	71%	59-83%	
Advanced degree	150	73	45%	36-55%		73	16	23%	12-34%		73	51	75%	64-86%	
Employment Status					*					**					**
Employed for wages or self-employed	523	232	42%	37-47%		232	62	29%	22-37%		232	153	69%	62-76%	
Retired	437	145	33%	28-38%		145	31	24%	16-32%		145	81	57%	47-66%	
Other (unemployed, unable to work, homemakers, students)	237	106	39%	31-47%		106	15	14%	7-21%		106	58	57%	46-68%	
Household Income					**					^					**
<$15,000	156	66	42%	33-52%		66	10	21%	6-37%		66	36	62%	48-76%	
$15,000-<$25,000	256	83	32%	25-39%		83	19	22%	12-32%		83	48	54%	42-67%	
$25,000-<$35,000	153	53	32%	23-41%		53	14	33%	16-50%		53	28	54%	38-71%	
$35,000-<$50,000	161	72	43%	34-53%		72	15	24%	11-38%		72	47	71%	59-83%	
$50,000-<$75,000	121	66	53%	41-64%		66	17	23%	12-35%		66	46	76%	64-88%	
$75,000 or greater	167	86	44%	34-55%		86	23	30%	19-42%		86	60	70%	59-81%	
Don't know/not sure/refused	188	61	33%	25-40%		61	10	16%	6-25%		61	29	51%	37-65%	
Body Mass Index					**					*					^
Healthy Weight (BMI 18.5-24.9)	350	54	15%	10-19%		54	10	17%	6-28%		54	36	70%	56-83%	
Overweight (BMI 25.0-29.9)	404	140	30%	25-36%		140	25	17%	10-24%		140	88	64%	55-73%	
Obese (BMI $\geq$ 30.0)	404	276	68%	63-74%		276	67	27%	20-33%		276	162	63%	56-69%	

~ Some data missing for education, employment status, and body mass index

** p-value $\leq$ 0.05

* p-value > 0.05 - 0.1

^ p-value > 0.1

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

	Eat five or more servings of fruits and vegetables per day #				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	1198	480	39%	36-43%	
Gender					**
Male	375	126	33%	27-39%	
Female	823	354	44%	40-48%	
Age					**
40-49 years	286	128	45%	38-52%	
50-64 years	477	177	34%	29-39%	
65 years and above	435	175	40%	35-45%	
Race					^
White	479	201	42%	37-48%	
African American or Black	683	261	37%	33-42%	
Education					**
Less than high school grad	230	74	35%	28-43%	
High school grad or GED	352	123	33%	27-39%	
College 1-3 years	289	118	38%	32-45%	
College grad	172	81	50%	41-59%	
Advanced degree	150	83	54%	43-64%	
Employment Status					*
Employed for wages or self-employed	522	223	43%	38-48%	
Retired	433	166	36%	31-41%	
Other (unemployed, unable to work, homemakers, students)	238	89	35%	27-42%	
Household Income					^
<$15,000	155	48	31%	22-40%	
$15,000-<$25,000	253	106	44%	36-51%	
$25,000-<$35,000	152	54	33%	24-43%	
$35,000-<$50,000	161	66	42%	32-51%	
$50,000-<$75,000	122	53	38%	28-49%	
$75,000 or greater	167	85	47%	37-58%	
Don't know/not sure/refused	188	68	35%	27-43%	

~ Some data missing for education and employment status
** p-value $\leq$ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1
# derived variable-see Methods section for explanation

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 10-4. FREQUENCY OF MEAT# CONSUMPTION BY DEMOGRAPHIC FACTORS, AMONG ADULTS AGE 40 YEARS AND OLDER ~

		One or fewer servings of meat per week			2 to 6 servings of meat per week			7 or more servings of meat per week			
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	1192	353	28%	25-31%	446	37%	33-40%	393	35%	32-39%	
Gender											^
Male	373	101	28%	22-34%	143	36%	30-42%	129	36%	30-42%	
Female	819	252	28%	25-32%	303	37%	33-41%	264	35%	31-39%	
Age											*
40-49 years	287	72	25%	18-32%	102	33%	26-39%	113	42%	35-50%	
50-64 years	476	150	30%	25-35%	179	38%	33-43%	147	32%	27-37%	
65 years and above	429	131	29%	24-34%	165	39%	34-45%	133	31%	26-36%	
Race											**
White	478	133	25%	20-29%	204	46%	41-52%	141	29%	24-34%	
African American or Black	678	210	30%	25-34%	231	31%	27-36%	237	39%	34-43%	
Education											*
Less than high school grad	225	69	30%	22-37%	78	35%	27-42%	78	36%	28-43%	
High school grad or GED	350	89	25%	18-32%	121	31%	25-37%	140	44%	37-51%	
College 1-3 years	291	88	28%	22-34%	116	41%	34-47%	87	32%	25-38%	
College grad	172	47	30%	22-39%	71	41%	32-49%	54	29%	21-37%	
Advanced degree	150	57	31%	23-40%	60	41%	32-51%	33	27%	17-37%	
Employment Status											^
Employed for wages or self-employed	522	156	28%	23-33%	195	38%	32-43%	171	34%	29-40%	
Retired	429	133	29%	24-34%	165	40%	35-45%	131	31%	26-36%	
Other (unemployed, unable to work, homemakers, students)	236	63	27%	19-36%	84	29%	23-36%	89	43%	35-52%	
Household Income											**
<$15,000	154	50	31%	22-39%	54	30%	22-38%	50	39%	29-49%	
$15,000-<$25,000	252	71	26%	19-32%	78	30%	24-37%	103	44%	36-52%	
$25,000-<$35,000	152	42	27%	18-36%	63	45%	35-55%	47	27%	19-35%	
$35,000-<$50,000	161	42	25%	17-32%	58	30%	22-38%	61	45%	36-55%	
$50,000-<$75,000	122	39	28%	18-39%	53	42%	31-53%	30	30%	18-41%	
$75,000 or greater	167	54	34%	23-45%	74	47%	37-57%	39	19%	12-26%	
Don't know/not sure/refused	184	55	27%	20-34%	66	33%	25-41%	63	40%	32-49%	

~ Some data missing for education and employment status

** p-value $\leq$ 0.05

* p-value > 0.05 - 0.1

^ p-value > 0.1

- Beef, pork, lamb, or veal

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

		Do not engage in moderate physical activity for at least 30 minutes a day, at least one day per week			Engage in moderate physical activity for at least 30 minutes a day, 1-2 days per week			Engage in moderate physical activity for at least 30 minutes a day, 3-4 days per week			Engage in moderate physical activity for at least 30 minutes a day, 5-7 days per week			
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	1146	485	42%	39-46%	83	7%	5-9%	233	20%	17-22%	345	31%	28-35%	
Gender														^
Male	365	149	42%	36-49%	31	7%	4-10%	76	19%	14-23%	109	32%	26-39%	
Female	781	336	42%	38-46%	52	7%	5-9%	157	21%	17-24%	236	30%	27-34%	
Age														*
40-49 years	278	106	40%	32-47%	19	7%	3-10%	59	19%	14-25%	94	34%	27-42%	
50-64 years	461	185	38%	33-44%	37	7%	4-9%	91	20%	16-24%	148	35%	29-40%	
65 years and above	407	194	51%	45-56%	27	7%	4-10%	83	19%	15-24%	103	23%	19-28%	
Race														^
White	460	177	40%	35-46%	32	7%	4-10%	105	23%	18-28%	146	29%	25-34%	
African American or Black	650	293	43%	38-48%	49	7%	4-9%	124	18%	15-22%	184	32%	27-37%	
Education														^
Less than high school grad	220	104	49%	41-57%	16	6%	2-9%	38	19%	12-26%	62	26%	19-33%	
High school grad or GED	333	151	44%	36-51%	23	7%	3-10%	60	15%	11-19%	99	35%	28-42%	
College 1-3 years	276	114	41%	34-48%	22	8%	5-12%	55	21%	15-27%	85	29%	23-36%	
College grad	167	60	33%	25-42%	11	6%	2-10%	44	28%	20-36%	52	33%	24-41%	
Advanced degree	146	53	40%	30-50%	11	7%	3-12%	35	21%	13-28%	47	32%	23-41%	
Employment Status														^
Employed for wages or self-employed	501	191	39%	33-44%	40	8%	5-11%	107	21%	17-25%	163	33%	27-38%	
Retired	410	182	46%	41-52%	27	6%	4-9%	84	21%	16-25%	117	27%	22-32%	
Other (unemployed, unable to work, homemakers, students)	230	108	44%	36-52%	16	6%	3-9%	41	15%	10-20%	65	35%	26-44%	
Household Income														*
<$15,000	149	64	45%	35-55%	13	7%	3-11%	26	16%	9-22%	46	32%	22-42%	
$15,000-<$25,000	241	115	48%	41-56%	11	3%	1-6%	44	17%	11-22%	71	31%	24-39%	
$25,000-<$35,000	150	71	49%	39-59%	10	5%	2-9%	23	15%	8-22%	46	30%	21-40%	
$35,000-<$50,000	158	57	36%	27-45%	16	11%	4-18%	40	26%	18-34%	45	27%	19-35%	
$50,000-<$75,000	117	51	42%	31-53%	8	7%	2-12%	24	18%	10-26%	34	33%	22-44%	
$75,000 or greater	164	53	30%	21-39%	14	8%	3-12%	44	28%	18-37%	53	34%	23-46%	
Don't know/not sure/refused	167	74	45%	36-54%	11	7%	3-12%	32	17%	11-23%	50	31%	22-39%	

~ Some data missing for education and employment status

** p-value $\leq$ 0.05

* p-value > 0.05 - 0.1

^ p-value > 0.1

TABLE 10-6. PARTICIPATION IN VIGOROUS PHYSICAL ACTIVITY, AMONG ADULTS AGE 40 YEARS AND OLDER ~

	Engage in vigorous physical activity 3 or more days per week for ≥ 20 minutes per occasion				
Selected Characteristic	**N**	**n**	**wt %**	**95% CI**	**Stat Sig**
Total Sample	1195	180	17%	14-20%	
Gender					**
Male	375	65	20%	15-26%	
Female	820	115	14%	11-17%	
Age					**
40-49 years	285	68	24%	18-30%	
50-64 years	478	72	16%	12-19%	
65 years and above	432	40	10%	6-13%	
Race					^
White	476	77	18%	14-22%	
African American or Black	683	94	16%	13-20%	
Education					**
Less than high school grad	230	19	10%	5-16%	
High school grad or GED	349	37	13%	8-18%	
College 1-3 years	289	51	18%	13-24%	
College grad	173	38	27%	18-35%	
Advanced degree	149	35	23%	15-31%	
Employment Status					**
Employed for wages or self-employed	520	111	23%	18-27%	
Retired	433	43	11%	8-15%	
Other (unemployed, unable to work, homemakers, students)	237	26	11%	6-16%	
Household Income					**
<$15,000	155	12	8%	3-13%	
$15,000-<$25,000	255	22	10%	5-16%	
$25,000-<$35,000	152	8	8%	2-15%	
$35,000-<$50,000	160	37	27%	18-36%	
$50,000-<$75,000	122	25	21%	12-29%	
$75,000 or greater	164	48	27%	19-36%	
Don't know/not sure/refused	187	28	16%	10-23%	

~ Some data missing for education and employment status
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 10-7. PARTICIPATION IN EITHER VIGOROUS PHSYCIAL ACTIVITY THREE OR MORE DAYS OR MODERATE ACTIVITY FIVE TO SEVEN DAYS PER WEEK, BY DEMOGRAPHIC CHARACTERISTICS, AMONG ADULTS 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 Sample	1145	430	40%	36-44%	
Gender					^
Male	366	141	43%	36-50%	
Female	779	289	38%	34-42%	
Age					**
40-49 years	280	132	48%	41-56%	
50-64 years	461	173	40%	35-46%	
65 years and above	404	125	29%	24-34%	
Race					^
White	457	178	38%	32-43%	
African American or Black	652	234	41%	36-46%	
Education					*
Less than high school grad	221	71	30%	23-37%	
High school grad or GED	331	117	43%	35-50%	
College 1-3 years	275	110	40%	33-48%	
College grad	168	71	45%	35-54%	
Advanced degree	146	61	43%	34-53%	
Employment Status					**
Employed for wages or self-employed	501	217	45%	39-50%	
Retired	409	137	32%	27-38%	
Other (unemployed, unable to work, homemakers, students)	230	76	40%	31-49%	
Household Income					^
<$15,000	149	52	37%	27-47%	
$15,000-<$25,000	241	82	37%	30-45%	
$25,000-<$35,000	149	52	37%	27-47%	
$35,000-<$50,000	157	59	40%	31-50%	
$50,000-<$75,000	118	47	43%	32-55%	
$75,000 or greater	162	75	48%	37-59%	
Don't know/not sure/refused	169	63	37%	29-46%	

~ Some data missing for education and employment status
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 10-8. CANCER SCREENING PRACTICES BY PHYSICAL ACTIVITY, DIET, AND BODY MASS INDEX

	Persons reporting to have ever had a fecal occult blood test ~					Persons reporting to have ever had a sigmoidoscopy or colonoscopy ~					Men reporting to have ever had a Prostate-Specific Antigen Test #					Men reporting to have ever had a digital rectal examination #				
Selected characteristic	**N**	**n**	**wt%**	**95% CI**	**Stat Sig**	**N**	**n**	**wt%**	**95% CI**	**Stat Sig**	**N**	**n**	**wt%**	**95% CI**	**Stat Sig**	**N**	**n**	**wt%**	**95% CI**	**Stat Sig**
Do you engage in vigorous physical activity for 3 or more days per week for 20 or more minutes per occasion?					^					^					^					^
Yes	110	63	54%	44-65%		112	74	66%	55-76%		36	28	68%	49-87%		40	36	90%	80-100%	
No	797	432	52%	48-56%		792	504	62%	58-66%		234	159	63%	55-71%		249	219	84%	78-90%	
In a typical week, how many days do you engage in moderate physical activity for at least 30 minutes a day?					^					**					^					^
0 days/week	379	186	49%	43-55%		375	239	64%	58-69%		109	73	64%	41-68%		117	101	83%	71-93%	
1-2 days/week	64	37	59%	46-73%		64	46	73%	61-85%		21	15	73%	53-92%		23	19	82%	66-99%	
3-4 days/week	174	114	60%	51-68%		174	122	68%	60-77%		56	43	72%	57-86%		58	55	91%	81-100%	
5-7 days/week	249	136	51%	44-59%		250	146	54%	46-61%		79	50	54%	41-68%		84	73	82%	71-93%	
How many total servings of fruits and vegetables do you eat each day?					^					^					^					^
0-2 fruits/vegetables per day	242	121	47%	40-55%		239	145	60%	52-67%		84	51	56%	42-69%		89	78	84%	73-94%	
3-4 fruits/vegetables per day	317	184	58%	51-64%		318	214	66%	59-72%		104	77	67%	55-78%		110	99	85%	75-94%	
5+ fruits/vegetables per day	350	191	51%	45-57%		349	220	61%	55-67%		81	57	67%	56-79%		89	77	85%	77-93%	
How many servings of red meat do you eat each week?					**					**					**					**
0-1 servings per week	280	165	54%	47-62%		280	180	58%	51-66%		80	50	54%	40-67%		84	73	83%	73-94%	
2-6 servings per week	343	195	57%	51-63%		342	233	71%	65-76%		103	82	81%	73-89%		112	104	93%	89-98%	
7+ servings per week	279	134	45%	39-52%		277	162	56%	49-63%		84	53	53%	40-66%		90	75	74%	61-87%	
Body Mass Index					*					^					^					^
Healthy weight (BMI 18.5 - 24.9)	261	140	47%	40-54%		260	170	61%	53-68%		82	55	59%	45-72%		91	80	81%	70-92%	
Overweight (BMI 25.0 - 29.9)	319	164	53%	46-59%		319	188	60%	53-67%		106	72	65%	53-76%		100	95	84%	75-93%	
Obese (BMI ≥ 30.0)	301	182	58%	51-64%		300	202	65%	59-72%		78	56	66%	53-78%		83	76	89%	80-97%	
Are you now trying to lose weight?					^					^					**					^
Yes	355	201	54%	48-59%		355	231	62%	57-68%		91	70	73%	63-84%		95	85	86%	77-95%	
No	558	296	51%	46-56%		555	351	62%	57-67%		180	117	59%	49-68%		195	171	84%	77-91%	

~ Age ≥ 50 years
# Men ≥ 50 years
~~ Age ≥ 40 years
#~ Women ≥ 40 years with an intact uterus
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

TABLE 10-8. CANCER SCREENING PRACTICES BY PHYSICAL ACTIVITY, DIET, AND BODY MASS INDEX

	Women reporting to have ever had a mammogram ~~					Women reporting to have ever had a Pap test #~					Persons reporting to have ever had oral cancer screening ~~				
Selected characteristic	**N**	**n**	**wt%**	**95% CI**	**Stat Sig**	**N**	**n**	**wt%**	**95% CI**	**Stat Sig**	**N**	**n**	**wt%**	**95% CI**	**Stat Sig**
Do you engage in vigorous physical activity for 3 or more days per week for 20 or more minutes per occasion?					^					^					**
Yes	115	106	90%	82-97%		85	82	95%	88-100%		173	90	48%	39-57%	
No	705	659	92%	89-95%		434	423	98%	97-99%		986	359	35%	31-39%	
In a typical week, how many days do you engage in moderate physical activity for at least 30 minutes a day?					^					^					^
0 days/week	336	316	93%	89-97%		207	200	97%	95-100%		471	162	33%	28-38%	
1-2 days/week	52	48	91%	81-100%		28	27	97%	92-100%		82	34	40%	28-52%	
3-4 days/week	157	148	94%	89-98%		101	100	97%	91-100%		228	101	41%	33-49%	
5-7 days/week	236	217	88%	83-94%		158	154	98%	97-100%		333	137	40%	33-47%	
How many total servings of fruits and vegetables do you eat each day?					^					^					**
0-2 fruits/vegetables per day	202	181	88%	82-93%		131	129	99%	98-100%		309	94	27%	21-32%	
3-4 fruits/vegetables per day	267	252	93%	89-97%		169	164	98%	96-100%		386	159	42%	36-48%	
5+ fruits/vegetables per day	354	336	93%	90-97%		220	213	96%	93-100%		467	197	41%	36-47%	
How many servings of red meat do you eat each week?					^					^					**
0-1 servings per week	252	240	95%	91-98%		168	166	98%	96-100%		347	143	38%	31-44%	
2-6 servings per week	303	284	92%	88-96%		175	172	99%	98-100%		431	185	44%	39-50%	
7+ servings per week	264	240	89%	84-94%		174	165	96%	92-99%		379	121	29%	24-35%	
Body Mass Index					^					^					^
Healthy weight (BMI 18.5 - 24.9)	233	218	93%	89-97%		161	158	97%	93-100%		333	143	41%	35-48%	
Overweight (BMI 25.0 - 29.9)	256	241	94%	91-97%		157	155	100%	99-100%		399	163	39%	33-45%	
Obese (BMI ≥ 30.0)	302	279	89%	84-94%		179	172	97%	94-100%		393	132	33%	27-38%	
Are you now trying to lose weight?					^					^					^
Yes	362	341	91%	87-95%		232	228	98%	96-100%		480	187	37%	32-42%	
No	463	430	92%	89-95%		289	279	97%	94-100%		686	264	37%	32-42%	

~ Age ≥ 50 years
# Men ≥ 50 years
~~ Age ≥ 40 years
#~ Women ≥ 40 years with an intact uterus
** p-value ≤ 0.05
* p-value > 0.05 - 0.1
^ p-value > 0.1

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

Chapter 11. Summary of the Baltimore City Cancer Survey

11.1 Overview

This document presents the results of the Baltimore City Cancer Survey (BCCS), conducted in 2007. The BCCS was designed to supplement data obtained from the 2002, 2004, and 2006 Maryland Cancer Surveys (MCS). The BCCS and MCS were commissioned by the Center for Cancer Surveillance and Control of the Maryland Department of Health and Mental Hygiene (DHMH) under the Cigarette Restitution Fund Program and conducted by the University of Maryland at Baltimore (UMB). They are population-based land-line telephone surveys designed to obtain information about cancer screening practices, knowledge of cancer and cancer screening, and lifestyle factors related to cancer among persons age 40 years and older.

The MCS was designed to gather information from a representative cross-section of Marylanders, proportionate to the overall state composition based on gender, age, and race. However, factors such as disproportionate age and geographic distribution, and other factors result in underrepresentation of some segments of the population in the statewide surveys. A review of sampling data from the three MCS surveys showed that African Americans have been underrepresented in the MCS, relative to their overall numbers in the Maryland population. For example, in the MCS 2006 survey of Maryland adults age 40 years and older, only 16.2% of respondents self-identified as African American or Black, although they comprise 25.3% of this segment of Maryland's population and 29.2% of the urban population in the state.

The BCCS described in this report was conducted to gather critical information on cancer risk factors, screening behaviors, health care access, and demographics for a representative sample of persons age 40 years and older living in Baltimore City. The information from this survey can help identify disparities in cancer screening prevalence and cancer risk behaviors for African Americans and other segments of the Baltimore City population. The BCCS was successful in completing interviews of 1,203 Baltimore City residents, of which 686 (57.0%) were African American, 481 (40.0%) were White, and 36 (3.0%) were of other races. Because of the small number of respondents whose race was other than White or African American, this group was not included in stratified analyses by race. However, responses from people of other races were included in analyses of all other stratified variables. Similarly, the small number of Latino respondents (n=20) precluded analysis of BCCS data based on ethnicity. The BCCS provides valuable information on cancer screening practices and cancer risk behaviors among Baltimore City residents and could point to new directions for interventions to increase cancer screening and to modify associated risk behaviors.

11.2 Comparisons to Healthy People 2010 Targets

Based on results of the BCCS, Baltimore City residents meet or exceed the Healthy People (HP) 2010 targets for the following cancer screening tests and other health measures (Chart 11-1 and Table 11-1):

- Ever having sigmoidoscopy: 62% of Baltimore City residents age 50 years and older reported ever having at least one sigmoidoscopy or colonoscopy, compared to the HP 2010 target of 50%.
- Fecal occult blood test (FOBT) in the past 2 years: 35% of Baltimore City residents age 50 years and older have had a recent FOBT, compared to the HP 2010 target of 33%.
- Mammogram in the past 2 years: 81% of Baltimore City women age 40 years and older have had a mammogram in the past 2 years, compared to the HP 2010 target of 70%.
- Ever having a Pap test: 98% of Baltimore City women age 40 years and older reported ever having a Pap test, compared to the HP 2010 target of 97%.
- Oral cancer screening in the past year: 26% of Baltimore City residents age 40 years and older said they have had an oral cancer screening in the past year, compared to the HP 2010 target of 20%.
- Dental visits: 56% of Baltimore City residents age 40 years and older reported visiting a dentist for any reason in the past year, meeting the HP 2010 target of 56%.

Baltimore City residents are also close to meeting the HP 2010 targets for having a Pap test in the past 3 years. Eighty-six percent (86%) of Baltimore City women age 40 years and older said they had a Pap test in the past 3 years, compared to the target of 90%.

There are no HP 2010 objectives related to routine prostate cancer screening, and the United States Preventive Services Task Force has not recommended such screening.[1] National screening data from the 2004 Behavioral Risk Factor Surveillance System (BRFSS), published by the American Cancer Society,[2] showed that 52% of men age 50 years and older have had a prostate-specific antigen (PSA) test and 50% have had a digital rectal exam (DRE) within the past year. By comparison, 49% of Baltimore City men (age 50 years and older) had a PSA in the past year and 52% had a DRE within the past year.

While Baltimore City residents have been successful in meeting or exceeding several HP 2010 targets related to cancer screening, they have been less successful in attaining targets for some behavioral and lifestyle goals aimed at reducing risk of cancer and other chronic diseases. Baltimore City residents do not meet the HP 2010 targets for the following lifestyle measures:

- Smoking: 26% of Baltimore City residents age 40 years and older reported current cigarette use, compared to the HP 2010 target of 12%.
- Fruit and vegetable consumption: Only 57% of Baltimore City residents age 40 years and older eat the recommended two or more servings of fruit per day, compared to an HP 2010 target of 75%. Only 29% reported eating three or more daily servings of vegetables, compared to the HP target of 50%.

[1] U.S. Preventive Services Task Force. 2008. Screening for Prostate Cancer. Available at http://www.ahcpr.gov/clinic/uspstf/uspsprca.htm. Last accessed February 17, 2009.
[2] American Cancer Society. Cancer Prevention and Early Detection Facts & Figures 2006. Atlanta: American Cancer Society, 2006. Available at http://www.cancer.org/downloads/STT/CPED2006PWSecured.pdf. Last accessed February 17, 2009.

- "Healthy" body mass index: Only 29% of Baltimore City residents age 40 years and older are in the healthy weight category, compared to the HP 2010 target of 60% (based on self-reported height and weight).
- Obesity: 34% of Baltimore City residents age 40 years and older are in the obese category, compared to the HP 2010 target of 15%.
- Vigorous exercise: Only 17% of Baltimore City residents age 40 years and older reported engaging in vigorous activity 3 or more days per week for at least 20 minutes per occasion, compared to the HP 2010 target of 30%.
- Moderate or vigorous physical activity: 40% of Baltimore City residents age 40 years and older reported engaging in regular physical activity – either 20 minutes of vigorous activity 3 or more days per week, or 30 minutes of moderate activity 5 or more days a week, compared to a target of 50%.

Among Baltimore City residents age 40 years and older, only 86% reported having health insurance coverage. This falls far short of the HP 2010 target of 100% coverage.

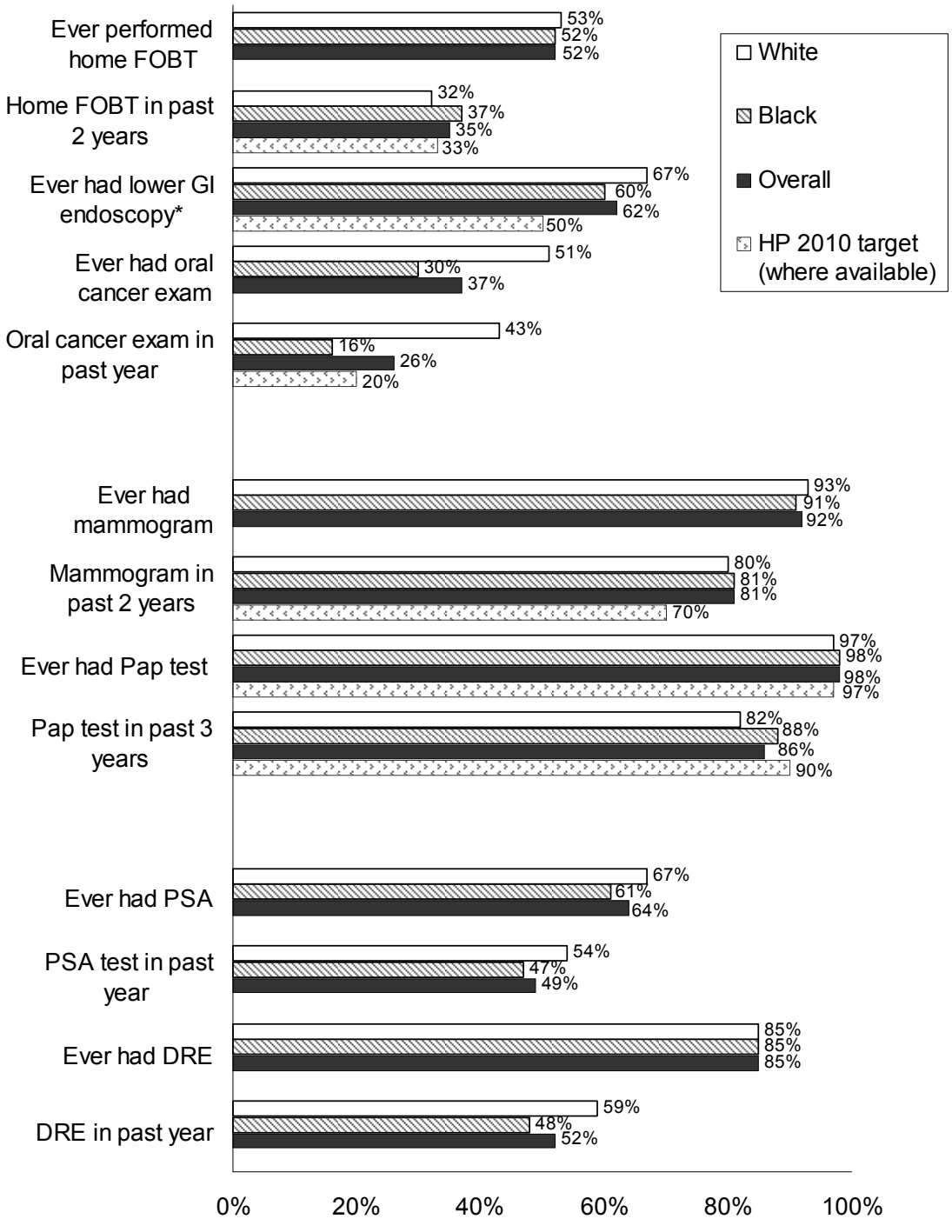
11.3 Racial Disparities in Cancer Screening and Cancer Risk Factors

The BCCS showed important differences in cancer screening prevalence across demographic groups, including race, age, education, income, and health insurance status. As shown in Chart 11-1, racial differences in prevalence were found for several types of cancer screening. Compared with White residents, African Americans had statistically significantly lower prevalence of the following cancer screening measures:

- Ever having lower gastrointestinal (GI) endoscopy (60% among Black residents vs. 67% for Whites; marginally significant difference)
- Ever having oral cancer exam (30% vs. 51%)
- Having an oral cancer exam in the past year (16% vs. 43%)

African American residents of Baltimore City are also significantly less likely than Whites to have health insurance, to have a health care provider (HCP), or to report having a dental visit in the past year. African Americans in Baltimore City are also less likely than Whites to be familiar with colorectal cancer (CRC) screening tests or to say they ever received a recommendation from an HCP for CRC screening using lower GI endoscopy. The prevalence of smoking and obesity are also significantly higher among African Americans in Baltimore City compared to White residents.

Chart 11-1. Prevalence of cancer screening by race, and comparisons to Healthy People 2010 targets -- Baltimore City Cancer Survey, 2007



* Sigmoidoscopy or colonoscopy

11.4 Health Care Access and Cancer Screening

Baltimore City residents who reported being without health care coverage or access to health care were significantly less likely to report cancer screening than persons with insurance and/or access to care, as highlighted below and in Chart 11-2 and Table 8-5.

- No health coverage: Compared to those with health insurance, those without health care coverage reported significantly lower rates of ever being screened for cancer, as well as lower prevalence of up-to-date screening, for all tests except ever having a Pap test among women.
- Currently have insurance but were without health insurance sometime within the past year: Those who were without insurance sometime in the past year reported lower prevalence of ever having lower GI endoscopy or mammography, or oral cancer screening in the past year, or mammography in the past 2 years, compared to those who had continuous coverage.
- Do not have a personal doctor or HCP: Baltimore City residents who do not have an HCP reported lower prevalence of every type of screening test except Pap test or FOBT, having an FOBT in the past 2 years, or having a DRE in the past year, compared to those who do have an HCP.
- No routine checkup within the past 2 years: For most cancer screening tests, residents age 40 years and older who have not had a physical exam in the past 2 years are significantly less likely to report screening than those who said they had a checkup within 2 years.

Receiving an HCP's recommendation for cancer screening is a very important factor in whether a person has a cancer screening test. Baltimore City residents who reported that an HCP had recommended CRC screening, or a mammogram or Pap test for women, had much higher prevalence of these screening tests than those who did not receive such recommendations. For most cancer screening tests examined in the BCCS, the lack of a doctor's recommendation was often a prominent reason cited by respondents for not having the test.

11.5 Comparisons to Other Urban Residents of Maryland

The results of the BCCS were compared to data from other urban areas of the state (consisting of the seven counties in the Metropolitan Baltimore-Washington, DC area), collected as part of the 2006 Maryland Cancer Survey (Table 11-1). Although urban data in prior surveys included Baltimore City, for the purposes of comparison in this report we removed Baltimore City responses. Compared with residents of other urban areas of Maryland (column 1 versus column 2 of Table 11-1), Baltimore City residents have lower prevalence of the following screening measures:

- Having heard of CRC screening tests (FOBT or sigmoidoscopy or colonoscopy)
- Ever performing a home FOBT
- Ever having a sigmoidoscopy or colonoscopy
- Being up-to-date with colonoscopy (in the past 10 years)

Chart 11-2. Differences in cancer screening prevalence among Baltimore City residents by measures of health care access *

	No health insurance	Without health insurance sometime in past 12 months	No personal doctor or health care provider	Two or more years since last routine checkup
Ever had FOBT	●	○	◘	●
Had FOBT in past 2 years	●	○	○	○
Ever had lower GI endoscopy	●	●	●	●
Ever had PSA test	●	○	●	●
Had PSA test in past year	●	○	●	●
DRE in past year	●	○	○	○
Ever had mammogram	●	●	●	●
Had mammogram in past 2 years	●	●	●	●
Ever had Pap test	○	○	○	◘
Had Pap in past 3 years	◘	○	●	●
Ever had oral cancer screening	●	○	●	●
Had oral cancer screening in past year	●	●	●	●

* Summarized from data in Table 8-5

Key:

- ● Significantly lower prevalence ($p \leq 0.05$)
- ◘ Marginally significant lower prevalence ($p > 0.05 – 0.1$)
- ○ No significant difference in prevalence ($p > 0.1$)

- Ever having a PSA test or having a PSA test in the past year
- Ever having an oral cancer exam or having an oral cancer exam in the past year

The prevalence of breast and cervical cancer screening among women was comparable for Baltimore City women and those living in other urban areas of the state. Compared with other urban areas, however, Baltimore City had a lower proportion of residents with health insurance, a higher proportion of current cigarette smokers, and higher prevalence of obesity.

Comparing columns 1 and 3 in Table 11-1, the BCCS results are generally consistent with the 2006 Maryland Behavioral Risk Factor Surveillance System (BRFSS) data for Baltimore City residents (Table 11-1).

Summary

In summary, Baltimore City residents, as a group, have achieved or exceeded many of the HP 2010 targets for cancer screening. However, the Baltimore City population does *not* meet several important HP 2010 lifestyle and behavioral goals aimed at reducing risk of cancer and other chronic diseases. The prevalence of smoking and obesity in Baltimore City both far exceed HP 2010 goals, and residents are not meeting targets for increasing physical activity or fruit and vegetable consumption. Baltimore City residents also do not compare favorably with residents of other urban areas of Maryland in terms of cancer screening and lifestyle factors. Compared with other urban residents in the state, Baltimore City residents are less likely to have ever been screened for or to be up-to-date with CRC, prostate cancer, and oral cancer screening, and have a higher prevalence of obesity and current smoking. Baltimore City also has a higher proportion of residents without health insurance compared to other urban areas of the state.

The BCCS also revealed disparities in cancer screening on the basis of health care access and race. For the Baltimore City population as a whole, the proportion of residents screened for CRC, prostate cancer, and oral cancer is significantly lower among those without health insurance and those who do not have a personal HCP. The BCCS also found important racial differences with respect to both health care access and cancer screening. African American residents of Baltimore City are significantly less likely than Whites to report having health insurance, to have an HCP, or to report having a dental visit in the past year. Compared with Whites, African Americans in Baltimore City have a lower prevalence of screening for CRC (lower GI endoscopy) and oral cancer. African Americans are also less likely to be familiar with CRC screening tests and to say they ever received a recommendation from an HCP for CRC screening using lower GI endoscopy. The prevalence of smoking and obesity are also significantly higher among African Americans in Baltimore City compared to White residents.

TABLE 11-1. COMPARISON OF SCREENING AND RISK BEHAVIOR CHARACTERISTICS MEASURED IN THE BALTIMORE CITY CANCER SURVEY TO MCS 2006, MARYLAND BRFSS 2006, U.S. BASELINE MEASUREMENTS, AND HEALTHY PEOPLE 2010 TARGETS

	Baltimore City Cancer Survey*		MCS 2006 urban data, excluding Baltimore City*		Maryland BRFSS 2006, Baltimore City data*		HP 2010 **	
							US Baseline	Target
Selected Population Characteristic	**wt %**	**95% CI**	**wt %**	**95% CI**	**wt %**	**95% CI**	**%**	**%**
Demographics (≥ 40 years)								
Married	40%	36-43%	69%	67-71%	42%	36-49%		
Less than high school graduate	18%	16-21%	4%	3-5%	18%	13-23%		
Income < $15,000 (of those who reported income)	14%	11-16%	4%	3-5%	13%	8-18%		
Colorectal Cancer Screening								
Heard of home kit for FOBT (≥ 40 years)	73%	69-76%	78%	76-79%				
Heard of sigmoidoscopy/ colonoscopy (≥ 40 years)	85%	82-88%	92%	91-94%				
Ever performed a home FOBT (≥ 50 years)	52%	48-56%	58%	56-61%	49%	41-57%		
Performed a home FOBT in the past two years (≥ 50 years)	35%	31-39%	33%	30-35%	32%	24-39%	24%	33%
Ever had a sigmoidoscopy/colonoscopy (≥ 50 years)	62%	58-66%	71%	68-73%	64%	57-71%	37%	50%
Of those who had lower GI endoscopy, most recent endoscopy was a sigmoidoscopy (≥ 50 years)	8%	5-11%	11%	9-13%				
Of those who had lower GI endoscopy, most recent endoscopy was a colonoscopy (≥ 50 years)	92%	89-95%	89%	87-91%				
Up to Date Colorectal Cancer Testing (≥ 50 years)								
Never Tested	25%	22-29%	18%	16-20%				
Tested but not up to date	9%	7-11%	11%	9-13%				
Up-to-date with only FOBT in the past year	8%	6-10%	6%	5-7%				
Up-to-date with only sigmoiodoscopy in the past 5 years	2%	1-3%	3%	2-4%				
Up-to-date with FOBT in the past year and sigmoidoscopy in the past 5 years	2%	1-4%	2%	1-3%				
Up-to-date with colonoscopy in the past 10 years +/- FOBT	54%	50-58%	60%	58-63%				
Prostate Cancer Screening (men ≥ 50 years)								
Heard of PSA test (≥40 years of age)	74%	68-80%	77%	74-80%				
Ever had a PSA test	64%	56-71%	77%	74-81%	83%	72-98%		
Had a PSA test in the past year	49%	42-56%	60%	56-64%	54%	41-67%		
Ever had a DRE	85%	79-90%	90%	87-92%	86%	74-98%		
Had a DRE in the past year	52%	45-59%	59%	55-63%	55%	42-67%		
Had both a PSA and DRE in the past year	39%	32-46%	48%	44-53%				
Breast and Cervical Cancer Screening (women ≥ 40 years)								
Health care provider recommended a mammogram in the past year	85%	82-87%	86%	84-88%				
Health care provider recommended a Pap test in the past year, among women who have not had a hysterectomy	75%	71-80%	79%	77-82%				
Ever had a mammogram	92%	89-94%	94%	93-95%	88%	83-94%		
Had a mammogram in the past 2 years	81%	78-84%	83%	81-85%	83% ^^	75-90%	67%	70%
Ever had a Pap test, among women who have not had a hysterectomy	98%	96-99%	98%	97-99%	96%	93-100%	92% ~	97% ~
Had a Pap test in the past 3 years, among women who have not had a hysterectomy	86%	83-89%	89%	87-91%	86%	78-93%	79% ~	90% ~

* Weighted data
** HP 2010 Midcourse Review, U.S. DHHS (2006)
^^ Women ≥ 50 years
~ Women ≥ 18 years
*^ Persons ≥ 2 years
*~ Persons < 65 years
^~ Adults ≥ 18 years
§ Adults ≥ 20 years

TABLE 11-1. COMPARISON OF SCREENING AND RISK BEHAVIOR CHARACTERISTICS MEASURED IN THE BALTIMORE CITY CANCER SURVEY TO MCS 2006, MARYLAND BRFSS 2006, U.S. BASELINE MEASUREMENTS, AND HEALTHY PEOPLE 2010 TARGETS

	Baltimore City Cancer Survey*		MCS 2006 urban data, excluding Baltimore City*		Maryland BRFSS 2006, Baltimore City data*		HP 2010 **	
							US Baseline	Target
Selected Population Characteristic	**wt %**	**95% CI**	**wt %**	**95% CI**	**wt %**	**95% CI**	**%**	**%**
Oral Cancer Screening (≥ 40 years)								
Had a dental visit during the past year	56%	52-59%	78%	76-80%	60%	54-67%	44% *^	56% *^
Ever had an oral cancer exam	37%	34-41%	49%	47-51%				
Had an oral cancer exam in the past year	26%	23-29%	39%	37-41%			13%	20%
Access to Health Care (≥ 40 years)								
Has health insurance	86%	83-89%	95%	94-96%	88%	84-92%	83% *~	100% *~
Had no health insurance sometime in the past 12 months	6%	4-7%	3%	2-3%				
Life style Factors (≥ 40 years)								
Body mass index								
Healthy weight individuals BMI (18.5-24.9)	29%	26-33%	32%	30-34%	24%	18-29%	42% ^~	60% ^~
Overweight individuals (BMI 25.0-29.9)	36%	32-40%	40%	37-42%	39%	32-45%		
Obese individuals (BMI ≥ 30.0)	34%	31-38%	28%	26-30%	38%	31-44%	23% ^~	15% ^~
Current smoking status								
Never smokers	47%	43-50%	54%	52-56%	48%	42-55%		
Former smokers	28%	25-31%	33%	31-35%	28%	22-34%		
Current smokers	26%	22-29%	14%	12-15%	24%	18-29%	24% §	12% §

* Weighted data
** HP 2010 Midcourse Review, U.S. DHHS (2006)
^^ Women ≥ 50 years
~ Women ≥ 18 years
*^ Persons ≥ 2 years
*~ Persons < 65 years
^~ Adults ≥ 18 years
§ Adults ≥ 20 years

Maryland Cancer Survey
Baltimore City Cancer Survey, 2007

Appendix

SURVEY QUESTIONNAIRE

Questionnaire for the Baltimore City Cancer Survey, 2007

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 Baltimore City residents. Your phone number has been chosen randomly for participation in this important survey. This call may be monitored for quality assurance purposes.

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

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

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

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

IF "YES":

And is this residence located in Baltimore City?

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

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

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

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

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

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

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

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

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

___ NUMBER OF MEN
___ NUMBER OF WOMEN

IF 1 MAN AND 1 WOMAN GO TO RANDOM SELECTION.

IF MORE THAN ONE OF EITHER GENDER

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 Baltimore 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 to better serve Baltimore residents.

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

SECTION 1: HEALTH STATUS

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

1.1 Would you say that in general your health is:

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

SECTION 2: HEALTH CARE ACCESS

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

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

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

GO TO 2.3 ←

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

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

GO TO 2.4 ←

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
6 Have never had health insurance
7 DON'T KNOW/NOT SURE
8 REFUSED
9 NA

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

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

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

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

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

1 Yes, only one
2 More than one
3 No → IF "NO" ASK: Is there more than one or is there no person who you think of?
7 DON'T KNOW/NOT SURE
8 REFUSED

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

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

SECTION 3: COLON CANCER SCREENING

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

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

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

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

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

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

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

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

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

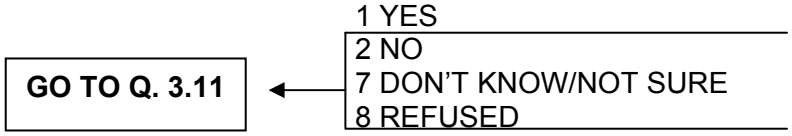
3.5 There are several tests used to screen for colon cancer. The first one we'll talk about is the fecal occult blood test or blood stool test. This is a test that may use a special kit, at home, to determine whether the stool contains blood. Have you ever heard of this test?

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

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

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

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



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

1 Within the past year (<12 MONTHS AGO)
2 Within the past 2 years (≥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
6 Never
7 DON'T KNOW/NOT SURE
8 REFUSED
9 NA

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

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

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

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

IF RESPONSE TO 3.8 WAS "WITHIN PAST YEAR " SKIP TO Q 3.12

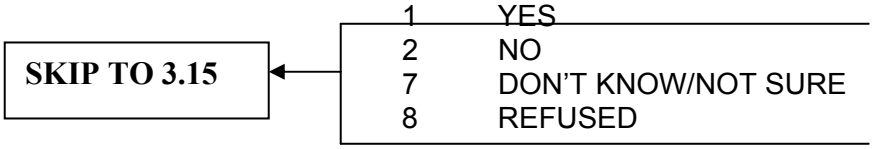
3.11 What is the most important reason you have {NEVER done /NOT done a HOME blood stool test in the PAST YEAR}? (READ ONLY IF NECESSARY – RECORD ALL RESPONSES NOTED BY RESPONDENT).

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

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

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

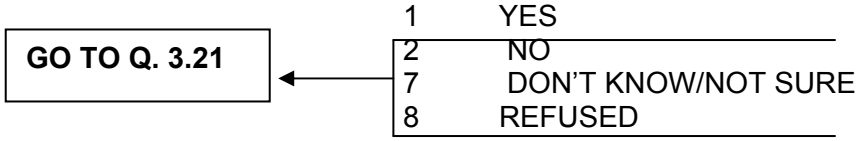
3.13 Has a doctor or other health professional ever RECOMMENDED that you have a sigmoidoscopy or colonoscopy?



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

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

3.15 Have you ever had a sigmoidoscopy or colonoscopy?



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

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

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

1 Within the past year (<12 MONTHS AGO)
2 Within the past 2 years (≥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 years ago
6 More than 10 years ago
7 DON'T KNOW/NOT SURE
8 REFUSED
9 NA

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

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

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

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

GO to 3.21

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

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

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

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

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

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

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

Deleted question 3.23 from original survey

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

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

1 MALE
2 FEMALE → **GO TO SECTION 5**
8 REFUSED

SECTION 4: PROSTATE CANCER SCREENING

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

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

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

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

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

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

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

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

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

GO TO Q. 4.7

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

1 Within the past year (<12 MONTHS AGO)
2 Within the past 2 years (≥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
6 Never
7 DON'T KNOW/NOT SURE
8 REFUSED
9 NA

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

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

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

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

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

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

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

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

1 Within the past year (<12 MONTHS AGO)
2 Within the past 2 years (≥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
6 Never
7 DON'T KNOW/NOT SURE
8 REFUSED
9 NA

4.10 Are you aware that Baltimore City has a no-cost prostate cancer screening program for low income city residents who qualify?

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

IF RESPONDENT IS MALE, GO TO SECTION 6

SECTION 5: WOMEN'S HEALTH

Now for some questions about screening tests for women.

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

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

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

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

5.3 Have you ever had a mammogram?

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

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

1 Within the past year (<12 MONTHS AGO)
2 Within the past 2 years (≥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
6 Never
7 DON'T KNOW/NOT SURE
8 REFUSED
9 NA

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

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

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

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

IF RESPONDENT HAS HAD TEST IN PAST TWO YEARS (Q 5.4) SKIP TO Q5.8.

5.7 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
88	REFUSED
99	NA

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

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

5.9 Have you ever had a Pap test?

	1	YES
GO TO 5.12 ←	2	NO
	7	DON'T KNOW/NOT SURE
	8	REFUSED
	9	NA

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

1	Within the past year (<12 MONTHS AGO)
2	Within the past 2 years (≥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
6	Never
7	DON'T KNOW/NOT SURE
8	REFUSED
9	NA

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

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

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

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

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

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

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

5.14 Are you aware that Baltimore City has no cost breast and cervical cancer screening programs for low income city residents who qualify?

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

SECTION 6: ORAL HEALTH/ORAL CANCER

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

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

INCLUDE VISITS TO DENTAL SPECIALISTS SUCH AS ORTHODONTISTS

1 Within the past year (<12 MONTHS AGO)
2 Within the past 2 years (≥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
6 Never
7 DON'T KNOW/NOT SURE
8 REFUSED

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

1 I THINK SO
2 YES
3 NO
7 DON'T KNOW/NOT SURE
8 REFUSED

GO TO Q 7.1 ←

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

1 Within the past year (<12 MONTHS AGO)
2 Within the past 2 years (≥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
6 Never
7 DON'T KNOW/NOT SURE
8 REFUSED
9 NA

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

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

SECTION 7: DEMOGRAPHICS

7.1 What is your age?

___ ___ ___(Code age in years)

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

7.2 Are you Hispanic and/or Latino?

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

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

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

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

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

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

7.5 Are you:

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

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

___ ___ NUMBER OF ADULTS
7 7 DON'T KNOW
8 8 REFUSED

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

___ ___ NUMBER OF CHILDREN

0 0 NONE
7 7 DON'T KNOW
8 8 REFUSED

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

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

7.9 Are you currently:

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

7.10 Is your annual household income from all sources . . . .
IF RESPONDENT REFUSES AT ANY INCOME LEVEL, CODE '99 REFUSED'
READ AS APPROPRIATE

0 4 Less than $25,000 **[IF "NO," ASK 05; IF "YES," ASK 03]**
($20,000 TO LESS THAN $25,000)
0 3 Less than $20,000 [**IF "NO," CODE 04; IF "YES," ASK 02]**
($15,000 TO LESS THAN $20,000)
0 2 Less than $15,000 **[IF "NO," CODE 03; IF "YES," ASK 01]**
($10,000 TO LESS THAN $15,000)
0 1 Less than $10,000 **[IF "NO," CODE 02]**

0 5 Less than $35,000 **[IF "NO," ASK 06]**
($25,000 TO LESS THAN $35,000)
0 6 Less than $50,000 [**IF "NO," ASK 07]**
($35,000 TO LESS THAN $50,000)
0 7 Less than $75,000 **[IF "NO," CODE 08]**
($50,000 TO LESS THAN $75,000)
0 8 $75,000 or more

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

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

__ __ __ pounds OR __ __ __ kilos

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

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

__ __/__ __ ft/inches OR __ __ __ centimeters

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

7.13 Which zip code do you reside in? _____

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

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

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

7.15 How many of these are residential numbers?

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

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

7.16 To your knowledge, are you now pregnant?

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

SECTION 8: EXERCISE/PHYSICAL ACTIVITY

The next series of questions are about exercise and physical activities

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

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

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

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

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

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

SKIP TO 8.5

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

___ Days per week

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

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

__ __: __ __ Hours and minutes per day

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

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

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

SKIP TO 8.8

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

___ DAYS PER WEEK

66 DO NOT DO ANY VIGOROUS PHYSICAL ACTIVITY FOR 20 OR MORE MINUTES AT A TIME (GO TO 8.8 IF APPROPRIATE)
77 DON'T KNOW/NOT SURE
88 REFUSED
99 NA

8.7. On days when you do vigorous activities for 20 or more minutes at a time, how much total time per day do you spend doing these activities?

__ __: __ __ HOURS AND MINUTES PER DAY

7 7 77 DON'T KNOW/NOT SURE
8 8 88 REFUSED
9 9 99 NA

IF TOTAL FOR MODERATE PHYSICAL ACTIVITY IS LESS THAN 30 MINUTES/DAY/5 DAYS/WK AND 20 MINUTES OF VIGOROUS PHYSICAL ACTIVITY LESS THAN 3 DAYS/WEEK ASK 8.8. ALL OTHERS SKIP TO 8.9.

8.8 I'm going to read you a list of reasons people give for not being physically active. Please tell me what is the **main** thing which prevents you most from doing more physical activity than you are currently doing:

1 A lack of motivation
2 A lack of time
3 A physical disability or other health limitation
4 There's no place to exercise
5 The cost is too high
6 Some other reason. (SPECIFY: _____)
7 DON'T KNOW/NOT SURE
8 REFUSED
9 NA

8.9 During the PAST 12 MONTHS, did a doctor or other health care professional RECOMMEND that you BEGIN or CONTINUE to do any type of exercise or physical activity?

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

SECTION 9: FRUITS AND VEGETABLES

Now I'm going to ask you some questions about the foods you eat.

How many servings of the following foods do you eat per week or per day?

9.1 How many servings of fruit juices such as orange, grapefruit, or tomato do you drink per week or per day?(A serving is 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
8 8 8 REFUSED

9.2 How many servings of fruit (not including juices) do you eat per week or per day? (A serving is on piece of fruit or a ½ cup of fruit)

1 ___ ___ PER DAY
2 ___ ___ PER WEEK

4 4 4 LESS THAN ONCE PER WEEK
5 5 5 NEVER
7 7 7 DON'T KNOW/NOT SURE
8 8 8 REFUSED

9.3 How many servings of leafy salad greens do you eat per week or per day? (A serving is 1 cup of leafy salad greens)

1 ___ ___ PER DAY
2 ___ ___ PER WEEK

4 4 4 LESS THAN ONCE PER WEEK
5 5 5 NEVER
7 7 7 DON'T KNOW/NOT SURE
8 8 8 REFUSED

9.4 How many servings of vegetables (not including salad or potatoes) do you eat per week or per day? (A serving is ½ cup of vegetables)

1 ___ ___ PER DAY
2 ___ ___ PER WEEK

4 4 4 LESS THAN ONCE PER WEEK
5 5 5 NEVER
7 7 7 DON'T KNOW/NOT SURE
8 8 8 REFUSED

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

1 ___ ___ PER DAY
2 ___ ___ PER WEEK

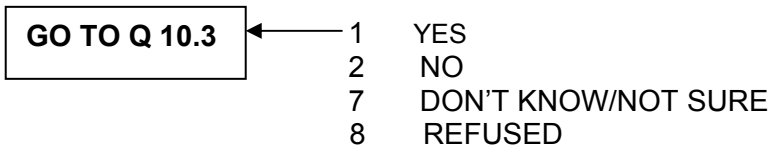
4 4 4 LESS THAN ONCE PER WEEK
5 5 5 NEVER
7 7 7 DON'T KNOW/NOT SURE
8 8 8 REFUSED

9.6 How many total servings of fruits and vegetables do you eat each day?

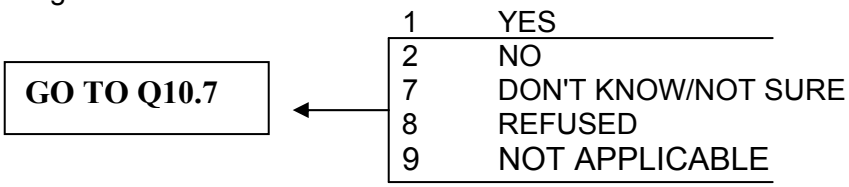
|___|___| NUMBER OF SERVINGS/DAY
5 5 NEVER
7 7 DON'T KNOW/NOT SURE
8 8 REFUSED

SECTION 10: Weight Control

10.1 Are you now trying to lose weight?



10.2 Are you now trying to maintain your current weight, that is to keep from gaining weight?

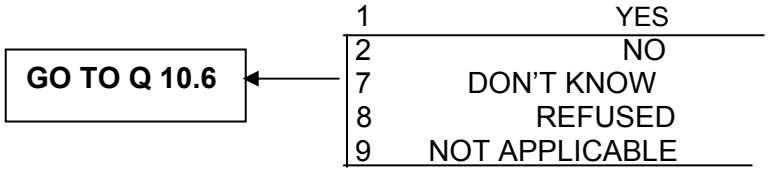


10.3 To lose weight (if "Yes" on Q10.1) OR
To keep from gaining weight (if "Yes" on Q10.2)
Are you . . . .

Eating fewer calories
Eating less fat
Eating fewer calories and less fat
Neither
7 DON'T KNOW
8 REFUSED
9 NOT APPLICABLE

10.4 Are you following a particular diet plan to . . . .

lose weight? [if "Yes" on Q10.1]
keep from gaining weight? [if "Yes" on Q10.2]



10.5 Which of the following best describes the diet plan you are currently following?

01 Atkins diet
02 DASH diet
03 Zone diet
04 Pritikin diet
05 South Beach diet
06 Diabetic diet
07. Weight watchers
08 Other: Specify _____

77 DON'T KNOW
88 REFUSED
99 NOT APPLICABLE

10.6 Are you using physical activity or exercise to...

lose weight? [if "Yes" on Q10.1]
keep from gaining weight? [if "Yes" on Q10.2]

1 YES
2 NO
7 DON'T KNOW
8 REFUSED
9 NOT APPLICABLE

10.7 How much would you like to weigh?

☐☐☐ pounds OR ☐☐☐ kilos

DON'T KNOW = 777
REFUSED = 888

10.8 In the past 12 months, has a doctor, nurse, or other health professional given you advice about your weight?

1 Yes, lose weight
2 Yes, gain weight
3 Yes, maintain current weight
4 No
7 DON'T KNOW
8 REFUSED

SECTION 11: ALCOHOL CONSUMPTION

11.1 A drink of alcohol is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of wine cooler, 1 cocktail, or 1 shot of liquor. During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage?

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

0 0 NO DRINKS IN PAST 30 DAYS
7 7 DON'T KNOW/NOT SURE
8 8 REFUSED

→ **GO TO Q 12.1**

11.2 On the days when you drank, about how many drinks did you drink on the average?

___ ___ Number of drinks
7 7 DON'T KNOW/NOT SURE
8 8 REFUSED
9 9 NA

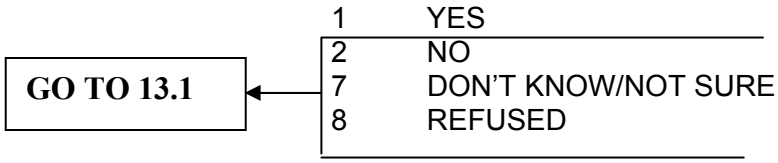
11.3 Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks on an occasion?

___ ___ Number of times

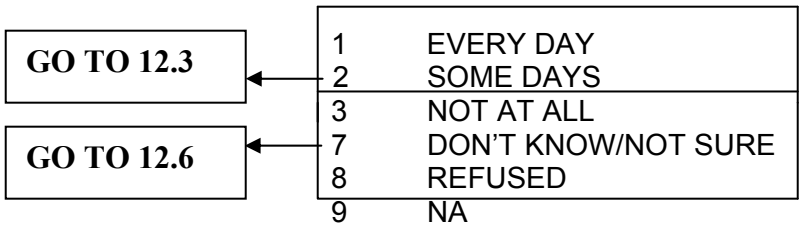
0	0	NONE
7	7	DON'T KNOW/NOT SURE
8	8	REFUSED
9	9	NA

SECTION 12: TOBACCO USE

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



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



12.3. On the average, about how many cigarettes do you now smoke per day, per week, or per month?

INTERVIEWER NOTE: 1 PACK = 20 CIGARETTES. IF 76 OR MORE CIGARETTES REPORTED, ENTER 76.

___	___	NUMBER OF CIGARETTES	1	per day
7	7	DON'T KNOW/NOT SURE	2	per week
8	8	REFUSED	3	per month
9	9	NA		

12.4. How soon after you wake up do you smoke your first cigarette?

1	Within 5 minutes
2	6-30 minutes
3	31 minutes – 60 minutes
4	After 60 minutes
7	DON'T KNOW
8	REFUSED
9	NA

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

GO TO 12.7	1 YES
GO TO 12.8	2 NO 7 DON'T KNOW/NOT SURE 8 REFUSED 9 NA

12.6 About how long has it been since you last smoked cigarettes regularly, that is, daily?

(READ ONLY IF NECESSARY)

GO TO 12.7 & 12.8	1 Within the past month (anytime less than 1 month) 2 Within the past 3 months (1 mo. to less than 3 mo) 3 Within the past 6 months (3 mo. to less than 6 mo.) 4 Within the past year (6 mo. but less than 12 mo.)
GO TO Q.12.7 &13.1	5 Within the past 5 years (1 yr but less than 5 yrs) 6 Within the past 15 years (5 yrs but less than 15 yrs) 7 15 years ago or more 77 DON'T KNOW 88 REFUSED 99 NA

12.7 Which of the following methods did you use to stop smoking the last time you stopped? (IF MORE THAN ONE ASK TO SPECIFY ONE THAT WAS MOST EFFECTIVE).

1 "Cold Turkey", quit on your own without help
2 Nicotine replacement (patch, gum, inhaler or nasal spray).
3 Non-nicotine medication (Zyban or Bupropion)
4 Behavioral therapy alone, no medication
5 Alternative therapy such as acupuncture, hypnosis or an herbal remedy
6 Other: Specify _____
7 DON'T KNOW/NOT SURE
8 REFUSED
9 NA

12.8. (ASK ALL CURRENT SMOKERS {Q12.2} AND ALL PAST SMOKERS WHO QUIT WITHIN THE PAST YEAR {12,6}) In the past 12 months, did a doctor, nurse, or other health professional advise you to quit smoking?

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

SECTION 13: OTHER TOBACCO PRODUCTS

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

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

CLOSING STATEMENT

That completes the interview. Everyone's answers will be combined to give us information about the health practices of people aged 40 and over in the Baltimore City. Thank you very much for participating in this important survey.