Maryland Cancer Survivor Report, 2009

An Analysis of Behavioral Risk Factor Surveillance System Data

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

Center for Cancer Surveillance and Control
Maryland Department of Health and Mental Hygiene

June 2011

Maryland Cancer Survivor Report, 2009

An Analysis of Behavioral Risk
Factor Surveillance System Data

June 2011

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

Center for Cancer Surveillance and Control
Maryland Department of Health and Mental Hygiene

Prepared by:

Eileen Steinberger, MD, MS
Carolyn Poppell, MS
Department of Epidemiology and Public Health
School of Medicine, University of Maryland, Baltimore

Carmela Groves, RN, MS
Courtney Lewis, MPH, CHES
Diane Dwyer, MD
Center for Cancer Surveillance and Control
Maryland Department of Health and Mental Hygiene

Please send inquiries to:
Surveillance and Evaluation Unit
Center for Cancer Surveillance and Control
Maryland Department of Health and Mental Hygiene
201 West Preston Street
Baltimore, MD 21201
410-767-0791

Table of Contents

Dedication

We dedicate this report to the cancer survivors in Maryland and their families in the hopes that the information found here will help to highlight the impact that cancer has on their lives. By addressing issues raised in this report on a statewide level, the quality of life and health care can be improved for all cancer survivors.

Acknowledgements

We would like to acknowledge Kelly Sage, MS, Center for Cancer Surveillance and Control, Maryland Department of Health and Mental Hygiene and Helio Lopez, MS, Behavioral Risk Factor Surveillance System (BRFSS) Program Coordinator, Office of Health Policy and Planning, Maryland Department of Health and Mental Hygiene (DHMH), for their consultation and support during the preparation of this report.

Citation

Material in this report may be reproduced or copied without permission. Please use the following citation as to the source of the information.

> Eileen K. Steinberger[1], Carolyn F. Poppell[1], Carmela Groves[2], Courtney Lewis[2], and Diane M. Dwyer[2]. Maryland Cancer Survivor Report, 2009. [1]Department of Epidemiology and Public Health, University of Maryland, Baltimore, MD and [2]Center for Cancer Surveillance and Control, Maryland Department of Health and Mental Hygiene, Baltimore, MD. The report is supported by the Maryland Cigarette Restitution Fund Program.

Section 1
Highlights of the Maryland Cancer Survivor Report, 2009

Cancer survivorship has been defined as 'the process of living with, through, and beyond cancer.'[1] Cancer survivorship begins at diagnosis and includes people who are free of cancer and those who live with cancer as a chronic disease, undergoing continued treatment and surveillance. In 2006, over 11 million cancer survivors were living in the United States.[2] Cancer survivors face an array of difficulties related to their cancer diagnosis and treatment. They are at risk for developing a recurrence of their original cancer or a second primary cancer. Depending on the treatment they received for their cancer, they may be at risk for long-term treatment effects including cardiovascular disease, osteoporosis, musculoskeletal complaints, decreased sexual function, bladder dysfunction, and fatigue. Cancer survivors may also experience psychological effects including depression and anxiety related to their diagnosis and treatment.

The purpose of this report is to examine health status, mental and physical quality of life, access to health care, and lifestyle behaviors of cancer survivors in Maryland. Cancer survivors are also compared in each of these domains to persons who have never experienced cancer. This report is based on data obtained from the Maryland Behavioral Risk Factor Surveillance System (BRFSS). For the first time in 2009, BRFSS respondents in Maryland were asked whether they were cancer survivors, and if so, they were asked the type of cancer of their most recent diagnosis. Survivors were also asked questions specific to their cancer treatment and health care.

Survey Sample and Demographics

- Of 8,135 BRFSS respondents from Maryland who answered the question about whether they ever had cancer, 936 were identified as cancer survivors (7.3% when weighted to the Maryland population).
- The proportion of cancer survivors increased with age, from 2.6% in the 18-49 years age group to 26.6% in the 75 years and older age group.
- A higher proportion of whites were cancer survivors (9.4%) compared to African Americans (4.4%).
- The most common types of cancer reported by Maryland survivors were (percents are weighted to the Maryland population):
    o Men: prostate cancer (30.1%); melanoma skin cancer (12.3%); colon or rectum cancer (8.5%); and cancer of the urinary tract (6%).
    o Women: breast cancer (37%); cancer of the female reproductive tract (16%); melanoma skin cancer (10%); and cancer of the colon or rectum (5%).

Health Status and Quality of Life

"Health-related Quality of Life" (HRQOL) refers to a person's perceived physical and mental health and physical functioning.
- Compared to persons without a history of cancer, a higher proportion of cancer survivors reported their general health status as fair or poor (26.4% vs. 11.6%).

- Compared to persons who never had cancer, survivors reported worse physical health. A lower proportion of cancer survivors reported no days in the last 30 days when their physical health was not good. A higher proportion of survivors reported 8-29 days and 30 days (in the last 30 days) when their physical health was not good.
- Cancer survivors were no different from persons without a history of cancer in the number of days when mental health was not good (due to stress, depression or problems with emotions).

Health Care Access

Continuity of care following primary cancer treatment is a key determinant of long-term health outcomes for cancer survivors.

- Approximately ninety-one percent (91.3%) of cancer survivors in Maryland have some form of health care coverage. Cancer survivors in Maryland appear to be no less likely to have health insurance coverage than persons without a cancer history.
- Survivors who were younger (age 18-49 years) were significantly less likely to have insurance than older survivors; non-white cancer survivors were less likely than white survivors to have coverage (77.7% vs. 95.5%, respectively).
- Cancer survivors in Maryland were significantly more likely than persons without a cancer history to have at least one health care provider (92.8 vs. 84.8%, respectively) and to have had a routine physical checkup in the past year (86.2% vs. 73.5%, respectively).
- In contrast to recently published studies, cancer survivors in Maryland were more likely than persons without a cancer history to have received an influenza vaccine in the past year (61.5% vs. 41.8%, respectively).

Lifestyle Behaviors

Cancer survivors are at increased risk for cancer recurrence and for developing a second cancer, and may also be at increased risk for other chronic diseases. Lifestyle behaviors such as smoking, excessive alcohol consumption, an unhealthy diet, and lack of physical activity can have adverse impacts on survival and quality of life for cancer survivors.

- A significantly higher proportion of cancer survivors reported they had smoked cigarettes at some time in their life compared to people without a history of cancer (48.8% vs. 37.5%, respectively).
- The proportion of cancer survivors who currently smoke was similar to that for persons without a history of cancer (12% vs. 15%, respectively).
- In Maryland, cancer survivors were significantly more likely to be nondrinkers than persons without a history of cancer (50.6% vs. 43.5%, respectively)
- The prevalence of high-risk drinking was significantly lower among cancer survivors than among persons without a history of cancer (8.8% vs. 14.2%, respectively).
- Cancer survivors were less likely than persons without cancer to meet Healthy People 2010 targets for regular moderate or vigorous physical activity (42.2% vs. 49.1%, respectively).

- Fruit and vegetable consumption was low among both cancer survivors and persons without cancer. Only 27.5% of survivors and 27.8% of respondents without cancer met the Food and Drug Administration's recommendation for eating five or more servings a day (proportions were not statistically significantly different).

[1] Clark EJ, Stovall EL, Leigh S, Siu AL, Austin DK, Rowland JH. Imperatives for quality cancer care: access, advocacy, action, and accountability, Silver Spring, MD: National Coalition for Cancer Survivorship; 1996.
[2] Horner MJ, Ries LAG, Krapcho M, Neyman N, Aminou R, Howlader N, Altekruse SF, Feuer EJ, Huang L, Mariotto A, Miller BA, Lewis DR, Eisner MP, Stinchcomb DG, Edwards BK, eds. SEER Cancer Statistics Review, 1975-2006, Bethesda, MD: National Cancer Institute; 2009 (based on November 2008 SEER data submission). Available at http://seer.cancer.gov/csr/1975_2006. Accessed March 7, 2011.

Section 2
Introduction

This report contains information on cancer survivorship in Maryland, as analyzed from the Behavioral Risk Factor Surveillance System (BRFSS) survey, which was conducted in 2009. In its mission to reduce the burden of cancer in Maryland, the Surveillance and Evaluation Unit of the Center for Cancer Surveillance and Control at the Maryland Department of Health and Mental Hygiene focused on this very important aspect of cancer, as part of the Maryland Cancer Survey project under the Cigarette Restitution Fund Program.

Cancer survivorship has been defined as 'the process of living with, through, and beyond cancer.'[1] Cancer survivorship begins at diagnosis and includes people who are free of cancer and those who live with cancer as a chronic disease (i.e., undergoing continued treatment and surveillance). According to data from 2006, over 11 million cancer survivors are living in the United States.[2] The number of cancer survivors living in the U.S. has tripled since the early 1970s, due to increased screening and early detection of some cancers (breast, cervical, colorectal, and prostate) and advances in cancer treatment. The prevalence of cancer survivors rises with increasing age; in 2002, 38% of survivors were between the ages of 20-64 years and 61% were age 65 years or older. Survivors of childhood cancer who are under 20 years of age made up 1% of cancer survivors. Half of cancer survivors have been diagnosed with cancers of the breast, prostate, or colon and rectum.

In 2006, the Institute of Medicine (IOM) and National Research Council of the National Academies released the report *From Cancer Patient to Cancer Survivor: Lost in Transition*, a monograph devoted to physical, psychological, social, and economic concerns of cancer survivors.[3] Cancer survivors face an array of difficulties related to their cancer diagnosis and treatment. They are at risk for developing a recurrence of their original cancer or a second primary cancer. Depending on the treatment they received for their cancer, they may be at risk for long-term treatment effects including cardiovascular disease, osteoporosis, musculoskeletal complaints, decreased sexual function, bladder dysfunction, and fatigue. Cancer survivors may also experience psychological effects including depression and anxiety related to their diagnosis and treatment. Physical and psychological well being are important components of 'quality of life,' a term used to describe an individual's assessment of his own general well being. The transition from active cancer treatment to post-treatment care is an important time for the long-term health of cancer survivors.

According to the IOM report, essential components of survivorship care include: 1) prevention of recurrent cancers, new cancers, and other late effects; 2) surveillance for new or recurrent cancers, and the medical and psychological effects of treatment; 3) intervention for the consequences of cancer and its treatment; and 4) co-ordination between specialists and primary care providers to better ensure health needs are being met. Integral to achieving these components is the cancer survivor's in-depth knowledge of his/her cancer and its treatment, continued health care (related to both the cancer and general well being), and ongoing preventive care. The IOM report has made recommendations concerning all of these areas.

For the first time in 2009, the BRFSS survey asked respondents whether they were cancer survivors, and if they answered 'Yes,' they were asked about their type of cancer and several questions specific to their cancer treatment and care. Cancer survivors were also asked the questions about access to health care, risk and preventive behaviors, and quality of life that were asked of all respondents. By analyzing these questions, this report hopes to cast light on the care of cancer survivors as they transition from active treatment to the post-cancer treatment phase of their health care. It also hopes to compare cancer survivors to those who have never experienced cancer in areas of access to health care and preventive behaviors.

[1] Clark EJ, Stovall EL, Leigh S, Siu AL, Austin DK, Rowland JH. Imperatives for quality cancer care: access, advocacy, action, and accountability, Silver Spring, MD: National Coalition for Cancer Survivorship; 1996.

[2] Horner MJ, Ries LAG, Krapcho M, Neyman N, Aminou R, Howlader N, Altekruse SF, Feuer EJ, Huang L, Mariotto A, Miller BA, Lewis DR, Eisner MP, Stinchcomb DG, Edwards BK, eds. SEER Cancer Statistics Review, 1975-2006, Bethesda, MD: National Cancer Institute; 2009 (based on November 2008 SEER data submission). Available at http://seer.cancer.gov/csr/1975_2006. Accessed March 7, 2011.

[3] Hewitt M, Greenfield S, Stovall E, eds. From cancer patient to cancer survivor: lost in transition. Washington, DC: The National Academies Press, 2006.

Section 3.
Methodology

The Maryland data from the 2009 Behavioral Risk Factor Surveillance System (BRFSS) survey is available on the website from the Centers for Disease Control and Prevention (CDC).[1] The BRFSS is an annual state-based system of health surveys funded by the CDC. In Maryland, the survey is overseen by the Maryland Department of Health and Mental Hygiene (DHMH). It is a population-based random-digit-dial survey, using disproportionate stratified sampling.[2] The BRFSS is administered to adults, age 18 years and older, residing in private households and focuses on behavioral risk factors, preventive health measures, and health care access.

Sampling and Technical Information[3]

The sampling scheme for BRFSS can be found on the BRFSS website at http://www.cdc.gov/brfss/technical_infodata/surveydata/2009/overview_09.rtf. A pool of 101,400 landline telephone numbers were provided by Genesys – Market Systems Group (MSG) for this survey. Telephone numbers are divided into three groups, or strata, and are sampled separately. Within each strata, there are the high-density (listed one-plus) and medium-density (unlisted one-plus) blocks. Each 'block' of telephone numbers consists of one hundred consecutive phone numbers that contain the same area code, prefix, and first two digits of the suffix and all possible combinations of the last two digits. Telephone numbers that come from hundred blocks with at least one listed household telephone number are put in the either the high-density stratum (listed one-plus blocks) or medium-density stratum (unlisted one-plus blocks). The two strata provide a probability sample of all households in Maryland with landline telephones, such that each household has an equal chance of being selected for the survey. (For this survey a small number of cell phone interviews (250) were conducted as part of a pilot study and are included in the dataset for analysis.)

Data Collection

The survey was administered by Macro International, a research firm with headquarters in Calverton, Maryland, using computer assisted telephone interview (CATI) technology. To reach a final disposition for each telephone number, up to 15 calling attempts were made on various days of the week and at different times of the day. If someone answered the telephone, the number was confirmed to be a residential phone number. Non-residential numbers were ineligible. If the interviewer determined that there was only one person age 18 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 approximately of 20 minutes. In 2009 interviewers asked questions about a variety of topics including demographics, chronic disease, health risk factors, access to health care, and cancer survivorship. The Council of American Survey Research Organizations (CASRO) response rate, defined as Completed Interviews/(Known Eligible + Presumed Eligible), was 39.7%.

Questionnaire

Questions for this report focused on health status, health care access, and preventive and health behaviors. In addition, several questions specific to cancer treatment and post-treatment care were examined.

Data Analysis

A final weight was assigned to each respondent according to the BRFSS weighting protocol.[4] Pre-stratification weighting was based on the sampling probability among six strata, residential telephone sampling among the two density strata of phone numbers (listed one-plus and not listed one-plus), the number of adults age 18 years and older in the respondent's household, and the inverse of the number of residential telephone numbers in each household. Post-stratification weights were calculated so that the responses represented the Maryland population 18 years and older for age, race, and sex. We did not age adjust the data to the 2000 United States standard population.

For the purposes of this report, a cancer survivor answered 'Yes' when asked 'Have you ever been told by a doctor, nurse, or other health care professional that you have cancer?' Respondents were asked how many different types of cancer they had and could answer one, two, or three. Respondents were asked at what age they were first diagnosed with cancer and what type of cancer was the most recent diagnosis. ***Persons who reported their most recent cancer to be a non-melanoma skin cancer were not included among the cancer survivor group.*** Non-melanoma skin cancers are usually superficial basal or squamous cell carcinomas and not among the cancers reported to the Maryland Cancer Registry.

Respondents were asked to report their ethnicity as either Hispanic or non-Hispanic and 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, people who reported their race as something different from white or black/African American or their ethnicity as Hispanic, regardless of race, were grouped together as people of "other race." In the data tables where responses are examined by race and compared only among cancer survivors, whites were compared to non-whites, grouping African Americans with Hispanic, Asians, Native Hawaiian or Other Pacific Islanders, American Indian or Alaska Natives, and other races.

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 are excluded from 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. In the stratified results tables, urban or rural area of residence was determined by self-reported county of residence, where urban counties included Anne Arundel, Baltimore, Carroll, Harford, Howard, Montgomery, and Prince George's counties, and Baltimore City; rural counties included the remaining 16 counties in Southern and Western Maryland and on the Eastern Shore. The ages of the respondents were grouped into four categories; 18-49 years; 50-64 years; 65-74

years, and 75 years and older. Marital status was grouped into four categories: married or a partner of an unmarried couple; divorced or separated; widowed; and never married. Education levels were combined into four categories: less than high school; high school graduate or General Equivalency Diploma (GED); some college (1-3 years) or technical school; and college graduate or higher. Reported annual household income categories were grouped into five categories: <$25,000; $25,000-<$35,000; $35,000-<$50,000; $50,000-<$75,000; and $75,000 or greater. Results in the tables are based on the number of respondents that answered a question.

Respondents were considered to have had the influenza vaccine if they answered 'Yes' to having had a flu shot in the past 12 months or the flu vaccine FluMist[TM] sprayed in the nose in the past 12 months.

'Current smokers' were defined as those who smoked at least 100 cigarettes or more in their entire life and, at the time of the survey, smoked every day or some days. 'Former smokers' were those who smoked at least 100 cigarettes in their life but were not smoking cigarettes at the time of the survey. 'Never smokers' were those who smoked less than 100 cigarettes in their life or who had never smoked.

Alcohol consumption was categorized according to use in the last 30 days; high-risk drinking, low-risk drinking, or non-drinkers. For women, high-risk drinking was defined as having more than seven drinks a week or engaging in binge drinking (having four or more drinks on one occasion). High-risk drinking for men was defined as consuming more than 14 drinks a week or engaging in binge drinking (having five or more drinks on one occasion.) Low-risk drinking was defined as reporting alcohol consumption in the last 30 days but did not meet the criteria for high-risk drinking. Non-drinkers reported zero alcohol consumption in the last 30 days.

Weekly physical activity performance and daily fruit and vegetable intake were examined using measures already calculated in the BRFSS dataset. Respondents were considered to be physically active if, by their responses, they participated in 30 minutes of moderate physical activity five or more times a week or 20 minutes of vigorous physical activity three or more times a week. Daily fruit and vegetable intake was calculated by summing the responses from questions about daily or weekly consumption of fruits, fruit juice, green salads, and vegetables. Respondents were considered to eat five or more servings of fruits and vegetables daily if, by their responses, their calculated fruit and vegetable intake was five or higher.

The survivor specific questions which are discussed in Section 8 (Health Care after the Cancer Diagnosis) were not asked of all respondents who said they were survivors, but of a smaller sample of 423, and were weighted to account for the smaller sample size. Not all questions were answered by the entire sub-sample. Report results reflect respondents who answered 'Yes' or 'No' to each question.

Statistical analyses (population-based numbers and percentages) were performed with weighted data using SAS Version 9.2. 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;

- 'Sample %' is the unweighted percent of the sample that had that characteristic
- 'wt %' (weighted percent) is the percent of the Maryland population based on the weighted sample who answered 'Yes' to the question or had that characteristic; and
- '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 as previously described). No results are suppressed in this report because of the small number of respondents in some sub-groups. Prevalence estimates derived from samples with less than 50 observations are included in the tables, but may be unreliable due to small numbers. Caution should be exercised when making comparisons based on a small number of respondents.

In the tables, the heading 'P-value' gives the measure of statistical significance. Using standard convention, p-values < 0.05 are considered to be statistically significant. If a statistically significant difference is present for a given characteristic and there are more than two levels of that characteristic (for instance, the four levels of education), a statistically significant difference is present between at least two levels of that characteristic, 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.

[1] Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System, Annual Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services. Available at http://www.cdc.gov/brfss/technical_infodata/surveydata.htm. Accessed March 7, 2011.

[2] Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System, Operational and User's Guide, Version 3.0. Atlanta, Georgia: U.S. Department of Health and Human Services. Available at http://ftp.cdc.gov/pub/Data/Brfss/userguide.pdf . Accessed March 7, 2011.

[3] Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System, Annual Survey Data, 2009 BRFSS Overview. Atlanta, Georgia: U.S. Department of Health and Human Services. Available at http://www.cdc.gov/brfss/technical_infodata/surveydata/2009/overview_09.rtf. Accessed March 7, 2011.

[4] Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System. Technical Information and Data. BRFSS Weighting Formula. Atlanta, GA. U.S. Department of Health and Human Services. Available at http://www.cdc.gov/brfss/technical_infodata/weighting.htm. Accessed March 7, 2011.

Section 4
Description of the Study Sample

Of the 8,591 adults who responded to the BRFSS in Maryland in 2009, 456 did not answer the question about whether or not they ever had cancer; therefore, 8,135 respondents served as the basis for this report. One thousand eighty-five (1,185) respondents reported they had cancer; 249 reported having non-melanoma skin cancer and are included in the persons *without* a history of cancer, leaving 936 respondents in the cancer survivor group. Seven hundred sixty (760) respondents reported having one type of cancer.

```
                    ┌─────────────┐
                    │    8,591    │
                    └──────┬──────┘
                           │              456 did not answer cancer question
                    ┌──────┴──────┐
                    │    8,135    │
                    └──────┬──────┘       Includes 249 with non-melanoma
                           │              skin cancer
         ┌─────────────────┴──────────────────┐
┌────────────────────────┐        ┌────────────────────────┐
│     936 Survivors      │        │         7,199          │
│ (760 [81%] reported    │        │   No History of Cancer │
│      one cancer)       │        │                        │
└────────────────────────┘        └────────────────────────┘
```
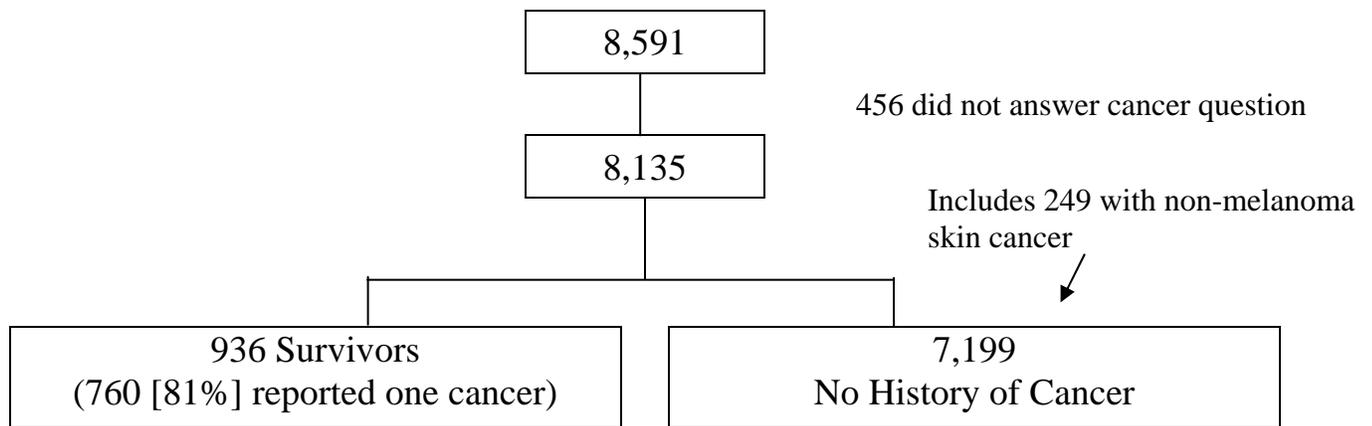
Table 4-1 shows the demographics of the sample and the demographics after being weighted to the Maryland population by age, race, and sex. Males comprised 37.4% of the sample, and were weighted to reflect 47.6% of the population. White non-Hispanics comprised 76.8% of the sample, African American non-Hispanics were 16.3%, and persons of other races (including Hispanic ethnicity) made up 6.9%. Whites were weighted to 59.9%, African Americans were weighted to 25.3%, and persons of other race, including Hispanic ethnicity were weighted to 14.9%.

When examining the ages of respondents weighted to the Maryland population (Table 4-1), 37.6% were 18-39 years, 20.6% were 40-49 years, 25.4% were 50-64 years, 9.3% were 65-74 years, and 7.2% were 75 years and older. When examining marital status, 61.9% of the weighted population were married or the partner of an unmarried couple compared to 10.1% that were divorced or separated, 6.1% were widowed, and 21.9% reported they had never married. Of the weighted population, 44.1% reported they had at least graduated from college, 25.3% had some college education or had gone to technical school, 23.9% were high school graduates or received their general equivalency diploma (GED), and 6.7% had not graduated from high school.

In 2009, 7.3% of the adult population in Maryland reported they were cancer survivors. Significant differences were identified when examining cancer survivorship by several demographic characteristics (Table 4-2).
  • A higher proportion of rural residents were cancer survivors compared to urban residents.

11

- As age increased, the proportion of survivors increased from 2.6% of the 18-49 year age group to 26.6% of the 75 years and older age group.
- A higher proportion of whites were cancer survivors (9.4%) compared to African Americans (4.4%) or people of other races (4.2%).
  - White females and white males were the highest proportion of survivors (10.4% and 8.3%, respectively).
- No significant difference in the proportion of cancer survivors was seen by education level.
- Differences in income distribution were seen by cancer survivor status.
  - A higher proportion of those who reported earning less than $25,000 were cancer survivors (9.8%) compared to the proportion of those earning $75,000 or more (6.0%).

Table 4-3 compares demographic characteristics between cancer survivors and the rest of the population.
- There was no difference by sex or education status.
- Cancer tends to be a disease of older age.
  - 79.3% of survivors reported their age as 50 years and older; in contrast, the majority of the non-cancer population (61.2%) was younger than 50 years of age.
- Differences by race were seen between survivors and the non-cancer population.
  - While the proportion of whites in the non-cancer population was 58.5%, the proportion among cancer survivors was 76.4%.
  - 15.1% of survivors reported their race as African American compared to 26.1% in the non-cancer population.
- Differences by income were seen between survivors and the non-cancer population.
  - 19.3% of cancer survivors were in the lowest income group compared to 14.1% of persons without a history of cancer.
  - 34.3% of cancer survivors were in the highest income group (> $75,000) compared to 42.4% of persons without a history of cancer.

Table 4-4 lists the specific types of cancer, most recently diagnosed, reported by sex and weighted to the Maryland population; 352 were reported by men and 584 reported by women.
- Examining weighted percentages among men, almost 30.1% of cancer survivors reported a history of prostate cancer, 12.3% had melanoma skin cancer, 8.5% had cancer of the colon or rectum, and 4.6% had cancer of the urinary tract.
- Among women, 32.3% were breast cancer survivors, 18.7% reported cancer of the female reproductive tract, 9.1% had melanoma skin cancer, and 5.3% reported cancer of the colon or rectum.

Age at diagnosis of the first cancer ranged from 2 years to 89 years. As a weighted percentage, 1.6% of cancer survivors were diagnosed with cancer in childhood (younger than 18 years of age; Table 4-5).

TABLE 4-5. AGE AT FIRST CANCER DIAGNOSIS

Age at Diagnosis	N	Sample %	wt %
Less than 18 years	12	1.3%	1.6%
18-39 years	177	19.4%	25.3%
40-49 years	166	18.2%	16.7%
50-64 years	305	33.4%	32.1%
65-74 years	178	19.5%	17.4%
75 years and older	74	8.1%	7.0%

Over 34% of the cancer survivors have been diagnosed within the previous 5 years. Almost 18% are long-term survivors, reporting that at least 21 years had elapsed since their diagnosis (Table 4-6).

TABLE 4-6. YEARS ELAPSED SINCE FIRST CANCER DIAGNOSIS

Years since Diagnosis	N	Sample %	wt %
Less than 2 years	167	18.5%	18.6%
3-5 years	144	15.9%	15.8%
6-10 years	190	21.0%	22.1%
11-15 years	144	15.9%	17.8%
16-20 years	80	8.8%	7.9%
21 years or more	180	19.9%	17.8%

TABLE 4-1. DEMOGRAPHICS OF THE SURVEY SAMPLE AGE 18 YEARS AND OLDER, WEIGHTED TO THE MARYLAND POPULATION

Selected Characteristic	Total Sample			
	N	sample %	wt %	95% CI
Total Population	8135	100.0%	100.0%	
Area of Residence (82 missing)				
Urban	4270	53.0%	77.7%	77.0-78.5%
Rural	3783	47.0%	22.3%	21.5-23.0%
Sex				
Male	3043	37.4%	47.6%	45.9-49.3%
Female	5092	62.6%	52.4%	50.7-54.1%
Age (109 missing)				
18-39 years	1545	19.2%	37.6%	35.8-39.4%
40-49 years	1569	19.5%	20.6%	19.3-21.8%
50-64 years	2634	32.8%	25.4%	24.1-26.6%
65-74 years	1277	15.9%	9.3%	8.6-9.9%
75 years and older	1001	12.5%	7.2%	6.6-7.8%
Race (141 missing)				
White	6137	76.8%	59.9%	58.1-61.6%
African American or Black	1306	16.3%	25.3%	23.8-26.9%
Other	550	6.9%	14.8%	7.0-9.4%
Race and Sex (141 missing)				
White male	2361	29.5%	28.6%	27.1-30.0%
African American male	403	5.0%	11.0%	9.7-12.3%
Other male	225	2.8%	8.1%	6.7-9.5%
White female	3776	47.2%	31.3%	30.0-32.6%
African American female	903	11.3%	14.3%	13.2-15.5%
Other female	325	4.1%	6.7%	5.8-7.7%
Marital Status (35 missing)				
Married or partner of unmarried couple	4791	59.1%	61.9%	60.2-63.6%
Divorced or separated	1213	15.0%	10.1%	9.3-11.0%
Widowed	1002	12.4%	6.1%	5.6-6.7%
Never married	1094	13.5%	21.9%	20.2-23.6%
Education (30 missing)				
Less than high school	520	6.4%	6.7%	5.7-7.6%
High school grad or GED	2102	25.9%	23.9%	22.5-25.4%
College 1-3 years	1915	23.6%	25.3%	23.7-26.8%
College grad or more	3568	44.0%	44.1%	42.5-45.7%
Household Income				
<$25,000	1323	16.3%	14.5%	13.2-15.7%
$25,000-<$35,000	635	7.8%	6.6%	5.8-7.3%
$35,000-<$50,000	946	11.6%	11.9%	10.7-13.0%
$50,000-<$75,000	1117	13.7%	13.1%	12.1-14.2%
$75,000 or greater	3046	37.4%	41.8%	40.2-43.4%
Don't know/not sure or refused	1068	13.1%	12.2%	4.9-6.8%

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 4-2. COMPARISON OF DEMOGRAPHIC CHARACTERISTICS BY CANCER SURVIVORSHIP STATUS

Selected Characteristic	Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Population	936	7.3%	6.7-8.0%	7199	92.7%	92.0-93.3%	
Area of Residence							0.03
Urban	449	7.1%	6.3-7.9%	3821	92.9%	92.1-93.7%	
Rural	483	8.5%	7.5-9.4%	3300	91.5%	90.6-92.5%	
Sex							0.15
Male	352	6.8%	5.8-7.8%	2691	93.2%	92.2-94.2%	
Female	584	7.8%	7.0-8.6%	4508	92.2%	91.4-93.0%	
Age							<0.0001
18-49 years	125	2.6%	1.9-3.3%	2989	97.4%	96.7-98.1%	
50-64 years	288	8.9%	7.6-10.1%	2346	91.1%	89.9-92.4%	
65-74 years	251	18.2%	15.5-20.9%	1026	81.8%	79.1-84.5%	
75 years and older	265	26.6%	22.9-30.2%	736	73.4%	69.8-77.1%	
Race							<0.0001
White	809	9.4%	8.6-10.2%	5328	90.6%	89.8-91.4%	
African American or Black	83	4.4%	3.2-5.6%	1223	95.6%	94.4-96.8%	
Other	28	4.2%	2.0-6.4%	522	95.8%	93.6-98.0%	
Race and Sex							<0.0001
White male	304	8.3%	7.1-9.4%	2057	91.7%	90.6-92.9%	
African American male	29	4.5%	2.6-6.3%	374	95.5%	93.7-97.4%	
Other male	9	4.6%	0.8-8.3%	216	95.4%	91.7-99.2%	
White female	505	10.4%	9.3-11.5%	3271	89.6%	88.5-90.7%	
African American female	54	4.4%	2.8-5.9%	849	95.6%	94.1-97.2%	
Other female	19	3.7%	1.8-5.7%	306	96.3%	94.3-98.2%	
Marital Status							<0.0001
Married or partner of unmarried couple	499	7.2%	6.4-8.0%	4292	92.8%	92.0-93.6%	
Divorced or separated	162	11.5%	8.8-14.3%	1051	88.5%	85.7-91.2%	
Widowed	209	19.4%	16.1-22.6%	793	80.6%	77.4-83.9%	
Never married	61	2.4%	1.5-3.2%	1033	97.6%	96.8-98.5%	
Education							0.86
Less than high school	71	7.6%	5.2-10.0%	449	92.4%	90.0-94.8%	
High school grad or GED	243	6.9%	5.7-8.1%	1859	93.1%	91.9-94.3%	
College 1-3 years	229	7.2%	5.8-8.6%	1686	92.8%	91.4-94.2%	
College grad or more	391	7.6%	6.6-8.6%	3177	92.4%	91.4-93.4%	
Household Income							0.0012
<$25,000	193	9.8%	7.6-11.9%	1130	90.3%	88.1-92.4%	
$25,000-<$35,000	98	9.8%	7.2-12.4%	537	90.2%	87.6-92.8%	
$35,000-<$50,000	111	6.4%	4.7-8.1%	835	93.6%	91.9-95.3%	
$50,000-<$75,000	132	8.4%	6.2-10.6%	985	91.6%	89.4-93.8%	
$75,000 or greater	264	6.0%	5.1-6.9%	2782	94.0%	93.1-94.9%	
Don't know/not sure or refused	56	7.4%	5.7-9.1%	355	92.6%	90.9-94.3%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 4-3. COMPARISON OF CANCER SURVIVORS IN MARYLAND TO THOSE WITHOUT CANCER BY DEMOGRAPHIC CHARACTERISTICS

Selected Characteristic	Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	P-value
Area of Residence							0.03
Urban	449	74.5%	71.5-77.4%	3821	78.0%	77.2-78.8%	
Rural	483	25.5%	22.6-28.5%	3300	22.0%	21.2-22.8%	
Sex							0.15
Male	352	44.3%	39.7-48.9%	2691	47.9%	46.1-49.7%	
Female	584	55.7%	51.1-60.3%	4508	52.1%	50.3-53.9%	
Age							<0.0001
18-49 years	125	20.7%	16.1-25.3%	2989	61.2%	59.6-62.7%	
50-64 years	288	30.5%	26.6-34.5%	2346	25.0%	23.7-26.3%	
65-74 years	251	22.9%	19.4-26.3%	1026	8.2%	7.5-8.9%	
75 years and older	265	25.9%	22.2-29.6%	736	5.7%	5.1-6.2%	
Race							<0.0001
White	809	76.4%	71.5-81.3%	5328	58.5%	56.7-60.4%	
African American or Black	83	15.1%	11.5-18.8%	1223	26.1%	24.5-27.8%	
Other	28	8.4%	4.2-12.7%	522	15.3%	13.7-17.0%	
Race and Sex							<0.0001
White male	304	32.1%	28.1-36.1%	2057	28.3%	26.8-29.8%	
African American male	29	6.7%	4.0-9.3%	374	11.3%	10.0-12.7%	
Other male	9	5.0%	1.0-9.1%	216	8.3%	6.9-9.8%	
White female	505	44.3%	39.9-48.6%	3271	30.3%	28.9-31.6%	
African American female	54	8.5%	5.7-11.3%	849	14.8%	13.6-16.0%	
Other female	19	3.4%	1.7-5.2%	306	7.0%	6.0-8.0%	
Marital Status							<0.0001
Married or partner of unmarried couple	499	60.9%	56.5-65.3%	4292	61.9%	60.1-63.7%	
Divorced or separated	162	15.9%	12.3-19.6%	1051	9.7%	8.9-10.5%	
Widowed	209	16.2%	13.3-19.0%	793	5.3%	4.8-5.9%	
Never married	61	7.0%	4.6-9.5%	1033	23.1%	21.2-24.9%	
Education							0.86
Less than high school	71	6.9%	4.9-9.0%	449	6.7%	5.6-7.7%	
High school grad or GED	243	22.6%	19.1-26.1%	1859	24.1%	22.5-25.6%	
College 1-3 years	229	24.8%	20.7-29.0%	1686	25.3%	23.7-26.9%	
College grad or more	391	45.6%	41.1-50.1%	3177	44.0%	42.3-45.7%	
Household Income							0.0012
<$25,000	193	19.3%	15.5-23.0%	1130	14.1%	12.8-15.4%	
$25,000-<$35,000	98	8.7%	6.5-11.0%	537	6.4%	5.6-7.2%	
$35,000-<$50,000	111	10.3%	7.8-12.9%	835	12.0%	10.7-13.2%	
$50,000-<$75,000	132	15.0%	11.3-18.7%	985	13.0%	11.9-14.1%	
$75,000 or greater	264	34.3%	30.1-38.5%	2782	42.4%	40.7-44.1%	
Don't know/not sure or refused	138	12.3%	9.7-14.9%	930	12.1%	10.9-14.4%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 4-4. MOST RECENT TYPE OF CANCER* REPORTED BY CANCER SURVIVORS IN MARYLAND, BY SEX

Cancer Type	Total (N=936)			Men (N=352)			Women (N=584)		
	N	Sample %	wt%	N	Sample %	wt%	N	Sample %	wt%
Breast	220	23.5%	18.6%	3	0.9%	1.5%	217	37.2%	32.3%
Colon and rectum	59	6.3%	6.7%	29	8.2%	8.5%	30	5.1%	5.3%
Other GI^	16	1.7%	1.8%	10	2.8%	2.9%	6	1.0%	1.0%
Lung	26	2.8%	2.8%	15	4.3%	3.9%	11	1.9%	1.9%
Lymph node and bone marrow	34	3.6%	3.6%	14	4.0%	4.1%	20	3.4%	3.3%
Female reproductive~	91	9.7%	10.4%				91	15.6%	18.7%
Prostate	115	12.3%	13.3%	115	32.7%	30.1%			
Testicular	9	1.0%	1.4%	9	2.6%	3.2%			
Head and neck[#]	32	3.4%	5.1%	10	2.8%	5.3%	22	3.8%	5.0%
Urinary (bladder + renal)	35	3.7%	3.3%	20	5.7%	4.6%	15	2.6%	2.3%
Melanoma skin cancer	106	11.3%	10.5%	49	13.9%	12.3%	57	9.8%	9.1%
Other[&]	150	16.0%	16.6%	62	17.6%	17.3%	88	15.1%	16.0%
Unknown/refused	43	4.6%	5.6%	16	4.5%	6.3%	27	4.6%	5.1%

* Does not include non-melanoma skin cancers (see methods)

^ Includes esophagus, stomach, pancreas, and liver

~ Includes cervix, uterine, and ovarian

[#] Includes oral, pharyngeal, and thyroid

[&] Includes bone, brain, and cancers not listed above

Blank Page is Intentional

Section 5
Health Status and Health-Related Quality of Life

This section presents comparisons between cancer survivors and persons without cancer on self-reported health status and health-related quality of life measures. 'Quality of life' is a general term that imparts a sense of well-being and satisfaction of life as a whole. 'Health-related Quality of Life' (HRQOL) refers to a person's perceived physical and mental health, and physical functioning. They are indicators of community service needs and can be measured as intervention outcomes. Since 1993, the BRFSS has been collecting HRQOL information as part of the state-based full sample, using four questions (called 'Healthy Days' measures): one question on self-rated general health status and three questions to ascertain the number of days in the last 30 days in which physical health was not good, mental health was not good, and poor physical or mental health kept one from doing (i.e., prevented) usual activity. HRQOL data reflect the prevalence of disability associated with health problems and can be used to evaluate the effects of changes in policies and health programs.[1,2]

Self-reported Health Status

According to the World Health Organization (WHO), health is defined as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.'[3] Self-reported health status has been shown to be related to mortality; compared with persons who reported their health status as excellent, the relative risk for all-cause mortality was higher when health status was reported as good, fair, or poor.[4]

When examining the self-reported health status of the Maryland population, differences were seen between cancer survivors and those who had never had cancer (Table 5-1).
- A lower proportion of cancer survivors reported their health as excellent (13.4% vs. 23.5%) or very good (27.8% vs. 36.4%).
- A higher proportion of cancer survivors reported their health as fair or poor (26.4% vs. 11.6%).
- When stratified by age group, differences in self-reported health status between cancer survivors and persons without cancer were seen for those age 18-49 years and age 50-64 years.
- As shown in Table 5-2, in most demographic categories examined, a higher proportion of cancer survivors reported their health as only fair or poor, compared to those who never had cancer. This was true for men and women, persons of white or black race, all levels of education, and both urban and rural areas of residence.
- Among Maryland cancer survivors only, self-reported health status did not differ by sex, age, race, or area of residence (Table 5-3).
  - The proportion of cancer survivors reporting excellent, very good, or good health status increased with increasing education level, from 45.1% for those with less than a high school education to 84.6% among those with a college degree.
  - When examining only cancer survivors, self-reported health status was not significantly associated with years since diagnosis (Table 5-4).

Healthy Days Measures

Each of the Healthy Days measures in the BRFSS asks for how many days during the past 30 days: (1) was your physical health not good; (2) was your mental health not good; and (3) did poor physical or mental health keep you from doing (i.e., prevented) your usual activities. Respondents could answer that their health was not good or usual activities were not performed from 0 (zero) days to 30 days.

For the analyses in this section, five categories were created for examining the Healthy Days relationship by age: 0 (zero) days, 1-2 days, 3-7 days, 8-29 days, and 30 days. Three categories were used (0 [zero] days, 1-7 days, and 8-30 days) when examining the relationship of the Healthy Days measures with other demographic characteristics.

Physical Health
When comparing the physical health measure between cancer survivors and those who never had cancer, differences were seen by age and other demographic characteristics.
- For the group as a whole, cancer survivors report lower physical quality of life than people without cancer. A lower proportion of survivors reported 0 (zero) days when their physical health was not good (50.3% vs. 64.3%). A higher proportion of survivors reported more days (8-29 days and 30 days) when their physical health was not good (Table 5-5).
- These differences in the physical health measure were seen in all age groups except those age 65-74 years.
- In each demographic category examined, a higher proportion of cancer survivors reported more days (8-30 days) when their physical health was not good (Table 5-6.)
- When examining the physical health measure for cancer survivors only, no statistically significant differences were found by sex, age, race, or area of residence (Table 5-7).
  o The proportion of cancer survivors reporting the highest number of days (8-30 days) when physical health was not good decreased as the level of educational attainment increased, from 44.3% of those with less than a high school education to17.3% of college graduates.
  o Among cancer survivors, no significant difference in the physical health measure was found by years since cancer diagnosis (Table 5-8).

Mental Health
When comparing the mental health measure between cancer survivors and those who never had cancer, little difference was seen by age and other demographic characteristics.
- When examining the entire sample, 66.8% reported having 0 (zero) days when their mental health was not good. This percentage increased with increasing age (from 61.5% for those age 18-49 years to 82.2% among those age 75 years and older) (Table 5-9).
- There was no significant difference between cancer survivors (68.3%) and people without cancer (66.7%) on the mental health measure for the entire sample (Table 5-9).

- o When examined by age, a difference in the measure was seen only in those age 18-49 years; 48.7% of survivors reported having 0 (zero) days when their mental health was not good compared to 60.3% of people without cancer (Table 5-9).
- Differences were seen between survivors and people without cancer on some demographic characteristics, including race (for whites and people of other race) and for persons living in rural areas (Table 5-10).
    - o A higher proportion of white cancer survivors (70.8%) reported 0 (zero) days when their mental health was not good compared to white people without cancer (64.8%).
    - o A higher proportion of rural cancer survivors (17.2%) reported having 8-30 days when their mental health was not good, compared to rural people without cancer (11.9%).
- When examining the mental health measure of cancer survivors only, no statistically significant differences were found by sex, level of education, or area of residence (Table 5-11).
    - o Self-reported mental health of cancer survivors improved with increasing age.
    - o Cancer survivors in the youngest age group (age 18-49 years) were more likely to report the highest number of days (8-30 days) when their mental health was not good, compared to the two oldest age groups.
    - o Nonwhite cancer survivors were more likely than white cancer survivors to report the highest number of days (8-30 days) when their mental health was not good (28.1% vs. 12.0%, respectively).
    - o Among cancer survivors, no significant difference in the mental health measure was seen by years since cancer diagnosis (Table 5-12).

Performing Usual Activities
When comparing the inability to perform usual activities when physical or mental health was not good, differences were seen between cancer survivors and those who never had cancer.
- Cancer survivors were less likely than those without a history of cancer to report having 0 (zero) days when poor physical or mental health kept them from doing their usual activities (70.4% vs. 79.1%, respectively) (Table 5-13).
- This difference was seen in the two younger age groups.
    - o For those age 18-49 years, 57.0% of survivors reported 0 (zero) days when physical activity was limited, compared to 77.8% of persons without cancer. Among those age 50-64 years, 69.4% of cancer survivors reported 0 (zero) days of limitations, compared to 79.4% of persons without cancer.
    - o No statistical difference was seen in the older age groups (age 65-74 years and age 75 years and older) (Table 5-13).
- Differences between cancer survivors and those without a history of cancer were found by several demographic characteristics including gender, race (for whites and persons of other race), level of education (high school graduates and higher), and area of residence (Table 5-14).
    - o When examined by most of these demographic characteristics, a higher proportion of survivors reported 8-30 days of limited activity compared to

persons without cancer and a lower proportion reported 0 (zero) days without limitation compared to persons without cancer.
- When examining the number of days of limited physical activity due to poor mental or physical health for cancer survivors only, no statistically significant differences were found by sex, race, or area of residence (Table 5-15).
  - o When examined by age, the youngest age group (18-49 years) had the lowest proportion of 0 (zero) days of limited physical activity.
  - o Among cancer survivors, no significant difference in the number of days of limited physical activity was seen by years since cancer diagnosis (Table 5-16).

Summary

Compared to persons without a history of cancer, a higher proportion of cancer survivors reported their general health status as fair to poor. This was most evident among the younger age groups (below age 65 years) and the oldest group (age 75 years and older) and also held true across most other demographic characteristics examined. Physical health was lower among cancer survivors, compared to people without a history of cancer. A lower proportion of cancer survivors reported 0 days in the last 30 days when their health was not good and a higher proportion reported 8-29 days and 30 days when their physical health was not good.

As a group, cancer survivors were no different from persons without a history of cancer in the number of days when mental health was not good due to stress, depression, or problems with emotions. Only among the youngest age group (age 18-49 years) did cancer survivors report poorer mental health; a lower proportion of survivors report 0 (zero) days when their mental health was not good.

As a group, cancer survivors reported more days when activity was prevented because of poor physical or mental health than persons without cancer. This was seen in the younger age groups (age 18-49 years and 50-64 years) where a smaller proportion of survivors reported 0 (zero) days when their activity was limited and a higher proportion of survivors reported 30 days when their activity was limited. Decreased activity among cancer survivors was also evident when examined by most of the demographic characteristics.

---

[1] Hennessy CH, Moriarty DG, Zack MM, et al. Measuring health-related quality of life for public health surveillance. Pub Health Rep 1994;109(5):665-672.

[2] Centers for Disease Control and Prevention. Measuring Healthy Days. Atlanta, Georgia: U.S. Department of Health and Human Services , November 2000. Available at http://www.cdc.gov/hrqol/pdfs/mhd.pdf. Accessed March 7, 2011.

[3] Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.

[4] Desalvo KB, Bloser N, Reynolds K, et al. Mortality prediction with a single general self-rated health question. A meta-analysis. J Gen Intern Med 2006;21(3):267-75.

TABLE 5-1. RESPONSES TO QUESTION ABOUT GENERAL HEALTH, BY CANCER SURVIVOR STATUS AND AGE GROUP

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Sample*										<0.0001
Excellent	1625	22.7%	21.2-24.2%	110	13.4%	10.3-16.5%	1515	23.5%	21.9-25.0%	
Very good	2797	35.8%	34.2-37.4%	264	27.8%	23.9-31.6%	2533	36.4%	34.7-38.1%	
Good	2323	28.8%	27.3-30.3%	293	32.4%	28.0-36.9%	2030	28.6%	27.0-30.1%	
Fair or poor	1195	12.6%	11.6-13.7%	241	26.4%	22.3-30.6%	954	11.6%	10.4-12.7%	
18-49 years										<0.0001
Excellent	752	25.7%	23.4-28.0%	20	20.2%	10.1-30.2%	732	25.8%	23.5-28.2%	
Very good	1181	37.8%	35.3-40.3%	40	24.2%	14.8-33.6%	1141	38.2%	35.6-40.7%	
Good	833	27.2%	25.0-29.4%	32	27.8%	14.6-41.0%	801	27.2%	24.9-29.4%	
Fair or poor	283	9.3%	7.7-10.9%	31	27.9%	14.8-40.9%	252	8.8%	7.2-10.4%	
50-64 years										<0.0001
Excellent	525	21.2%	19.1-23.3%	29	12.4%	6.9-17.9%	496	22.0%	19.8-24.3%	
Very good	897	34.3%	32.0-36.7%	74	26.1%	19.6-32.5%	823	35.2%	32.6-37.7%	
Good	750	29.7%	27.3-32.1%	107	35.2%	28.2-42.2%	643	29.2%	26.6-31.7%	
Fair or poor	399	14.8%	13.0-16.5%	71	26.3%	19.7-32.9%	328	13.6%	11.8-15.4%	
65-74 years										0.3
Excellent	208	16.6%	13.9-19.3%	34	12.1%	7.5-16.8%	174	17.6%	14.4-20.8%	
Very good	420	33.4%	30.0-36.9%	90	38.4%	30.5-46.3%	330	32.3%	28.5-36.1%	
Good	378	31.3%	27.8-34.7%	72	31.8%	23.7-39.9%	306	31.1%	27.3-34.9%	
Fair or poor	238	18.7%	15.8-21.7%	51	17.7%	11.8-23.6%	187	19.0%	15.6-22.3%	
75 years and older										0.054
Excellent	116	12.2%	9.5-14.9%	27	10.4%	5.7-15.0%	89	12.8%	9.5-16.1%	
Very good	262	28.3%	24.5-32.2%	58	23.1%	16.2-30.0%	204	30.2%	25.6-34.7%	
Good	331	35.1%	31.1-39.1%	82	34.2%	26.1-42.3%	249	35.4%	30.7-40.1%	
Fair or poor	259	24.3%	20.9-27.8%	83	32.3%	24.7-39.9%	176	21.6%	17.9-25.3%	

* Sample by age does not equal the total sample, due to some respondents with missing age   Maryland Cancer Survivor Report, 2009

TABLE 5-2. SELF-REPORTED HEALTH STATUS BY CANCER SURVIVOR STATUS AND DEMOGRAPHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Sex										
Male										<0.0001
Excellent, very good, or good	2536	88.6%	86.8-90.3%	253	73.5%	66.3-80.7%	2283	89.7%	87.9-91.4%	
Fair or poor	439	11.4%	9.7-13.2%	87	26.5%	19.3-33.7%	352	10.3%	8.6-12.1%	
Female										<0.0001
Excellent, very good, or good	4209	86.3%	84.9-87.6%	414	73.7%	68.8-78.5%	3795	87.3%	85.9-88.7%	
Fair or poor	756	13.7%	12.4-15.1%	154	26.3%	21.5-31.2%	602	12.7%	11.3-14.1%	
Race										
White										<0.0001
Excellent, very good, or good	5144	88.9%	87.9-89.9%	587	75.7%	71.9-79.5%	4557	90.3%	89.3-91.3%	
Fair or poor	856	11.1%	10.1-12.1%	197	24.3%	20.5-28.1%	659	9.7%	8.7-10.7%	
African American										<0.0001
Excellent, very good, or good	1031	85.3%	83.0-87.7%	49	66.4%	53.8-78.9%	982	86.2%	83.8-88.6%	
Fair or poor	238	14.7%	12.3-17.0%	32	33.6%	21.1-46.2%	206	13.8%	11.4-16.2%	
Other										0.077
Excellent, very good, or good	458	85.0%	80.2-89.7%	19	66.9%	40.2-93.5%	439	85.8%	80.9-90.6%	
Fair or poor	75	15.0%	10.3-19.8%	9	33.1%	6.5-59.8%	66	14.2%	9.4-19.1%	
Education										
Less than high school										0.034
Excellent, very good, or good	283	62.1%	55.0-69.3%	30	45.1%	29.6-60.6%	253	63.5%	55.9-71.1%	
Fair or poor	217	37.9%	30.7-45.0%	37	54.9%	39.4-70.4%	180	36.5%	28.9-44.1%	
High school grad or GED										<0.0001
Excellent, very good, or good	1591	82.3%	79.9-84.6%	146	62.6%	54.4-70.9%	1445	83.7%	81.3-86.2%	
Fair or poor	455	17.7%	15.4-20.1%	91	37.4%	29.1-45.6%	364	16.3%	13.8-18.7%	
Some college 1-3 years										<0.0001
Excellent, very good, or good	1607	86.9%	84.2-89.5%	172	71.1%	60.5-81.8%	1435	88.1%	85.4-90.8%	
Fair or poor	261	13.1%	10.5-15.8%	51	28.9%	18.2-39.5%	210	11.9%	9.2-14.6%	
College grad or more										<0.0001
Excellent, very good, or good	3238	94.0%	93.1-94.9%	317	84.6%	80.1-89.0%	2921	94.8%	93.9-95.7%	
Fair or poor	260	6.0%	5.1-6.9%	62	15.4%	11.0-19.9%	198	5.2%	4.3-6.1%	
Area of Residence										
Urban										<0.0001
Excellent, very good, or good	3597	87.8%	86.5-89.1%	329	73.6%	68.3-79.0%	3268	88.9%	87.5-90.2%	
Fair or poor	566	12.2%	10.9-13.5%	105	26.4%	21.0-31.7%	461	11.1%	9.8-12.5%	
Rural										<0.0001
Excellent, very good, or good	3086	86.9%	85.5-88.3%	335	73.3%	68.3-78.2%	2751	88.1%	86.7-89.6%	
Fair or poor	609	13.1%	11.7-14.5%	135	26.7%	21.8-31.7%	474	11.9%	10.4-13.3%	

Total number of responses may not equal sample total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 5-3. CANCER SURVIVOR RESPONSES TO QUESTION ABOUT GENERAL HEALTH, BY DEMOGRPAHIC CHARACTERISTICS

	N	wt %	95% CI	P-value
Sex				0.96
Male				
Excellent, very good, or good	253	73.5%	66.3-80.7%	
Fair or poor	87	26.5%	19.3-33.7%	
Female				
Excellent, very good, or good	414	73.7%	68.8-78.5%	
Fair or poor	154	26.3%	21.5-31.2%	
Age				0.12
18-49				
Excellent, very good, or good	92	72.1%	59.0-85.2%	
Fair or poor	31	27.9%	14.8-41.0%	
50-64				
Excellent, very good, or good	210	73.7%	67.1-80.3%	
Fair or poor	71	26.3%	19.7-32.9%	
65-74				
Excellent, very good, or good	196	82.3%	76.4-88.2%	
Fair or poor	51	17.7%	11.8-23.6%	
75 years and older				
Excellent, very good, or good	167	67.7%	60.1-75.3%	
Fair or poor	83	32.3%	24.7-39.9%	
Race				0.14
White				
Excellent, very good, or good	587	75.7%	71.9-79.5%	
Fair or poor	197	24.3%	20.5-28.1%	
Non-white				
Excellent, very good, or good	68	66.5%	54.0-79.1%	
Fair or poor	41	33.5%	20.9-46.0%	
Education				<0.0001
Less than high school				
Excellent, very good, or good	30	45.1%	29.5-60.7%	
Fair or poor	37	54.9%	39.3-70.5%	
High school grad or GED				
Excellent, very good, or good	146	62.6%	54.4-70.9%	
Fair or poor	91	37.4%	29.1-45.6%	
Some college 1-3 years				
Excellent, very good, or good	172	71.1%	60.5-81.8%	
Fair or poor	51	28.9%	18.2-39.5%	
College grad or more				
Excellent, very good, or good	317	84.6%	80.1-89.0%	
Fair or poor	62	15.4%	11.0-19.9%	
Area of Residence				0.92
Urban				
Excellent, very good, or good	329	73.6%	68.3-79.0%	
Fair or poor	105	26.4%	21.0-31.7%	
Rural				
Excellent, very good, or good	335	73.3%	68.4-78.2%	
Fair or poor	135	26.7%	21.8-31.6%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 5-4. SELF-REPORTED HEALTH STATUS AMONG CANCER SURVIVORS, BY YEARS SINCE CANCER DIAGNOSIS

Health Status	Total			0-5 Years since Diagnosis			6-10 Years since Diagnosis			11 Years or More since Diagnosis			P-value
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	
Excellent	109	13.9%	10.7-17.2%	30	10.5%	5.9-15.0%	28	15.4%	9.1-21.6%	51	15.9%	10.3-21.6%	0.57
Very good	259	28.7%	24.8-32.6%	83	27.9%	21.4-34.4%	53	27.5%	19.0-36.0%	123	29.9%	24.0-35.8%	
Good	277	30.6%	26.5-34.6%	103	29.6%	23.2-36.1%	55	32.0%	22.8-41.2%	119	30.6%	24.3-36.8%	
Fair or poor	232	26.8%	22.6-31.1%	87	32.0%	24.9-39.1%	47	25.1%	13.7-36.5%	98	23.6%	18.1-29.1%	

Maryland Cancer Survivor Report, 2009

TABLE 5-5. NUMBER OF DAYS DURING PAST 30 DAYS THAT PHYSICAL HEALTH WAS REPORTED AS 'NOT GOOD,'
BY CANCER SURVIVOR STATUS AND AGE GROUP

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Sample										<0.0001
0 (zero) days	5043	63.3%	61.6-64.9%	488	50.3%	45.7-54.9%	4555	64.3%	62.6-66.0%	
1-2 days	908	13.7%	12.4-15.0%	83	9.6%	6.8-12.3%	825	14.0%	12.7-15.4%	
3-7 days	925	11.7%	10.6-12.8%	123	15.4%	11.5-19.3%	802	11.4%	10.3-12.5%	
8-29 days	640	6.9%	6.1-7.6%	108	12.2%	8.8-15.7%	532	6.5%	5.7-7.2%	
30 days	474	4.5%	3.9-5.0%	110	12.5%	9.5-15.4%	364	3.8%	3.3-4.4%	
18-49 years										<0.0001
0 (zero) days	1953	63.4%	61.0-65.9%	65	43.0%	30.5-55.6%	1888	64.0%	61.5-66.5%	
1-2 days	461	16.7%	14.7-18.7%	15	11.3%	3.7-18.9%	446	16.8%	14.8-18.9%	
3-7 days	386	12.0%	10.4-13.6%	18	22.3%	8.5-36.1%	368	11.7%	10.1-13.4%	
8-29 days	195	5.5%	4.4-6.6%	14	14.6%	2.6-26.6%	181	5.3%	4.2-6.3%	
30 days	92	2.3%	1.7-3.0%	12	8.9%	2.9-14.8%	80	2.2%	1.5-2.8%	
50-64 years										<0.0001
0 (zero) days	1627	63.1%	60.7-65.6%	135	48.8%	41.4-56.2%	1492	64.5%	61.9-67.1%	
1-2 days	288	11.2%	9.6-12.9%	34	11.9%	6.9-16.9%	254	11.2%	9.4-12.9%	
3-7 days	283	10.9%	9.4-12.4%	38	12.8%	7.8-17.7%	245	10.7%	9.1-12.3%	
8-29 days	214	7.8%	6.4-9.1%	38	11.2%	6.9-15.5%	176	7.4%	6.0-8.9%	
30 days	186	7.0%	5.7-8.3%	38	15.3%	9.7-21.0%	148	6.2%	4.9-7.5%	
65-74 years										0.67
0 (zero) days	818	64.7%	61.2-68.3%	155	61.5%	53.4-69.7%	663	65.4%	61.5-69.4%	
1-2 days	91	7.4%	5.6-9.2%	18	8.3%	3.9-12.7%	73	7.2%	5.3-9.2%	
3-7 days	125	10.5%	8.3-12.8%	26	10.3%	5.7-14.9%	99	10.6%	8.1-13.1%	
8-29 days	125	11.1%	8.6-13.6%	26	11.1%	5.5-16.6%	99	11.1%	8.3-14.0%	
30 days	91	6.2%	4.5-7.8%	23	8.9%	3.4-14.4%	68	5.6%	4.0-7.2%	
75 years and older										0.045
0 (zero) days	562	58.3%	54.1-62.5%	130	48.1%	39.8-56.3%	432	62.0%	57.2-66.8%	
1-2 days	61	7.4%	4.8-9.9%	16	6.7%	1.7-11.8%	45	7.6%	4.6-10.5%	
3-7 days	123	13.7%	10.7-16.6%	39	17.1%	10.9-23.3%	84	12.4%	9.1-15.8%	
8-29 days	101	9.9%	7.5-12.3%	28	12.5%	6.8-18.1%	73	9.0%	6.4-11.5%	
30 days	102	10.8%	8.2-13.4%	37	15.6%	9.4-21.9%	65	9.0%	6.3-11.7%	

* Sample by age does not equal the total sample, due to some respondents with missing age   Maryland Cancer Survivor Report, 2009

TABLE 5-6. NUMBER OF DAYS DURING PAST 30 DAYS THAT PHYSICAL HEALTH WAS REPORTED AS 'NOT GOOD,'
BY CANCER SURVIVOR STATUS AND DEMOGRAPHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			Stat Sig
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	
Sex										
Male										<0.0001
0 (zero) days	1968	66.1%	63.5-68.7%	202	52.7%	44.8-60.6%	1766	67.1%	64.3-69.8%	
1-7 days	626	23.9%	21.5-26.4%	57	20.1%	12.7-27.6%	569	24.2%	21.6-26.8%	
8-30 days	390	10.0%	8.5-11.4%	82	27.2%	19.8-34.6%	308	8.7%	7.3-10.1%	
Female										<0.0001
0 (zero) days	3075	60.7%	58.7-62.6%	286	48.5%	43.1-53.9%	2789	61.7%	59.6-63.8%	
1-7 days	1207	26.8%	24.9-28.6%	149	28.8%	23.6-33.9%	1058	26.6%	24.6-28.6%	
8-30 days	724	12.6%	11.4-13.8%	136	22.8%	18.2-27.3%	588	11.7%	10.5-13.0%	
Race										
White										<0.0001
0 (zero) days	3792	61.7%	59.9-63.5%	427	53.3%	48.8-57.8%	3365	62.5%	60.6-64.4%	
1-7 days	1387	26.0%	24.3-27.7%	172	22.3%	18.5-26.1%	1215	26.4%	24.5-28.2%	
8-30 days	855	12.3%	11.2-13.4%	188	24.4%	20.5-28.4%	667	11.1%	10.0-12.3%	
African American or Black										0.002
0 (zero) days	820	67.6%	64.2-70.9%	40	49.5%	36.0-63.0%	780	68.4%	65.0-71.8%	
1-7 days	288	22.5%	19.5-25.5%	21	28.0%	15.5-40.5%	267	22.3%	19.2-25.4%	
8-30 days	176	9.9%	8.1-11.7%	21	22.6%	11.9-33.2%	155	9.3%	7.5-11.2%	
Other										0.0005
0 (zero) days	344	62.2%	56.2-68.3%	13	24.6%	7.5-41.8%	331	63.9%	57.8-70.1%	
1-7 days	130	28.7%	22.9-34.6%	8	41.7%	14.0-69.3%	122	28.2%	22.2-34.2%	
8-30 days	64	9.0%	5.9-12.1%	7	33.7%	6.8-60.6%	57	7.9%	5.1-10.8%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 5-6. NUMBER OF DAYS DURING PAST 30 DAYS THAT PHYSICAL HEALTH WAS REPORTED AS 'NOT GOOD,'
BY CANCER SURVIVOR STATUS AND DEMOGRAPHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			Stat Sig
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	
Education										
Less than high school										0.008
0 (zero) days	239	50.4%	42.8-58.0%	20	32.7%	17.9-47.5%	219	51.8%	43.7-59.9%	
1-7 days	105	26.8%	19.8-33.9%	14	23.0%	9.6-36.5%	91	27.1%	19.6-34.7%	
8-30 days	149	22.8%	17.1-28.5%	30	44.3%	28.5-60.1%	119	21.0%	15.1-27.0%	
High school grad or GED										<0.0001
0 (zero) days	1249	61.8%	58.4-65.3%	108	39.4%	31.3-47.5%	1141	63.5%	59.8-67.2%	
1-7 days	424	24.1%	20.9-27.4%	55	29.9%	21.4-38.5%	369	23.7%	20.2-27.2%	
8-30 days	377	14.0%	12.0-16.0%	75	30.7%	22.6-38.7%	302	12.8%	10.7-14.8%	
Some college 1-3 years										<0.0001
0 (zero) days	1182	61.9%	58.4-65.5%	125	48.5%	38.7-58.4%	1057	63.0%	59.3-66.7%	
1-7 days	423	25.7%	22.3-29.0%	50	23.6%	15.6-31.6%	373	25.8%	22.3-29.4%	
8-30 days	276	12.4%	10.3-14.5%	48	27.9%	17.4-38.4%	228	11.2%	9.2-13.3%	
College grad or more										<0.0001
0 (zero) days	2350	66.4%	64.3-68.5%	234	59.1%	52.0-66.2%	2116	67.0%	64.8-69.2%	
1-7 days	878	25.9%	23.9-27.9%	87	23.7%	16.6-30.7%	791	26.1%	24.0-28.2%	
8-30 days	309	7.6%	6.6-8.7%	64	17.3%	12.3-22.2%	245	6.9%	5.8-8.0%	
Area of Residence										
Urban										<0.0001
0 (zero) days	2636	63.1%	61.1-65.1%	234	50.6%	44.7-56.4%	2402	64.0%	61.9-66.1%	
1-7 days	1021	25.9%	24.0-27.8%	104	25.3%	19.7-30.8%	917	26.0%	24.0-27.9%	
8-30 days	546	11.0%	9.9-12.2%	98	24.2%	18.9-29.5%	448	10.0%	8.9-11.2%	
Rural										<0.0001
0 (zero) days	2353	63.5%	61.3-65.8%	252	50.2%	44.3-56.0%	2101	64.8%	62.4-67.1%	
1-7 days	801	23.9%	21.8-25.9%	101	23.6%	18.3-28.8%	700	23.9%	21.7-26.1%	
8-30 days	556	12.6%	11.2-13.9%	119	26.3%	20.8-31.8%	437	11.3%	9.9-12.7%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 5.7 AMONG CANCER SURVIVORS, NUMBER OF DAYS DURING PAST 30 DAYS THAT PHYSICAL HEALTH WAS REPORTED AS 'NOT GOOD,' BY DEMOGRAPHIC CHARACTERISTICS

	N	wt %	95% CI	P-value
Sex				0.16
Male				
0 (zero) days	202	52.7%	44.8-60.6%	
1-7 days	57	20.1%	12.7-27.6%	
8-30 days	82	27.2%	19.7-34.6%	
Female				
0 (zero) days	286	48.5%	43.0-53.9%	
1-7 days	149	28.8%	23.6-33.9%	
8-30 days	136	22.8%	18.2-27.3%	
Age				0.16
18-49				
0 (zero) days	65	43.0%	30.4-55.6%	
1-7 days	33	33.6%	19.6-47.5%	
8-30 days	26	23.4%	11.0-35.9%	
50-64				
0 (zero) days	135	48.8%	41.4-56.2%	
1-7 days	72	24.7%	18.2-31.2%	
8-30 days	76	26.5%	20.0-33.0%	
65-74				
0 (zero) days	155	61.5%	53.4-69.7%	
1-7 days	44	18.5%	12.4-24.6%	
8-30 days	49	19.9%	12.7-27.2%	
75 years and older				
0 (zero) days	130	48.1%	39.9-56.3%	
1-7 days	55	23.8%	16.4-31.2%	
8-30 days	65	28.1%	20.5-35.7%	
Race				0.14
White				
0 (zero) days	427	53.3%	48.8-57.8%	
1-7 days	172	22.3%	18.5-26.1%	
8-30 days	188	24.4%	20.5-28.4%	
Non-white				
0 (zero) days	53	40.5%	28.4-52.6%	
1-7 days	29	32.9%	19.7-46.1%	
8-30 days	28	26.6%	14.4-38.8%	

Total number of responses may not equal sample total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 5.7 AMONG CANCER SURVIVORS, NUMBER OF DAYS DURING PAST 30 DAYS THAT PHYSICAL HEALTH WAS REPORTED AS 'NOT GOOD,' BY DEMOGRAPHIC CHARACTERISTICS

	N	wt %	95% CI	P-value
Education				0.003
Less than high school				
0 (zero) days	20	32.7%	17.8-47.6%	
1-7 days	14	23.0%	9.5-36.5%	
8-30 days	30	44.3%	28.5-60.2%	
High school grad or GED				
0 (zero) days	108	39.4%	31.3-47.5%	
1-7 days	55	29.9%	21.4-38.5%	
8-30 days	75	30.7%	22.6-38.7%	
Some college 1-3 years				
0 (zero) days	125	48.5%	38.6-58.4%	
1-7 days	50	23.6%	15.5-31.6%	
8-30 days	48	27.9%	17.4-38.5%	
College grad or more				
0 (zero) days	234	59.1%	52.0-66.1%	
1-7 days	87	23.7%	16.7-30.7%	
8-30 days	64	17.3%	12.3-22.2%	
Area of Residence				0.83
Urban				
0 (zero) days	234	50.6%	44.7-56.4%	
1-7 days	104	25.3%	19.7-30.8%	
8-30 days	98	24.2%	18.9-29.5%	
Rural				
0 (zero) days	252	50.2%	44.3-56.0%	
1-7 days	101	23.6%	18.3-28.8%	
8-30 days	119	26.3%	20.8-31.7%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 5-8. AMONG CANCER SURVIVORS, NUMBER OF DAYS DURING PAST 30 DAYS THAT PHYSICAL HEALTH WAS REPORTED AS 'NOT GOOD,' BY YEARS SINCE CANCER DIAGNOSIS

Days	Total			0-5 Years since Diagnosis			6-10 years since Diagnosis			11 Years or More since Diagnosis			P-value
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	
0 (zero) days	469	50.5%	46.1-55.0%	151	45.8%	38.5-53.1%	97	50.5%	40.0-60.9%	221	54.3%	47.6-61.0%	0.59
1-7 days	202	24.2%	20.3-28.1%	80	27.8%	21.3-34.4%	49	25.1%	16.8-33.4%	73	20.9%	14.9-27.0%	
8-30 days	210	25.2%	21.0-29.5%	71	26.4%	19.7-33.1%	41	24.4%	12.9-35.9%	98	24.8%	19.0-30.5%	

TABLE 5-9. NUMBER OF DAYS DURING PAST 30 DAYS THAT MENTAL HEALTH WAS REPORTED AS 'NOT GOOD,'
BY CANCER SURVIVOR STATUS AND AGE GROUP

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Sample										0.083
0 (zero) days	5535	66.8%	65.2-68.4%	649	68.3%	63.6-72.9%	4886	66.7%	65.0-68.4%	
1-2 days	738	10.2%	9.2-11.3%	79	9.0%	6.5-11.6%	659	10.3%	9.2-11.4%	
3-7 days	758	10.4%	9.3-11.5%	66	7.1%	5.0-9.2%	692	10.6%	9.5-11.8%	
8-29 days	600	8.1%	7.1-9.1%	70	8.9%	5.6-12.2%	530	8.0%	7.0-9.1%	
30 days	368	4.5%	3.8-5.2%	50	6.7%	3.3-10.0%	318	4.3%	3.6-5.0%	
18-49 years										0.024
0 (zero) days	1907	61.5%	59.0-64.0%	68	48.7%	35.4-62.1%	1839	61.9%	59.3-64.4%	
1-2 days	360	12.2%	10.5-13.9%	13	11.9%	4.1-19.7%	347	12.2%	10.5-13.9%	
3-7 days	382	12.4%	10.7-14.1%	13	9.8%	3.7-15.8%	369	12.4%	10.7-14.2%	
8-29 days	289	9.4%	7.8-10.9%	19	16.8%	4.7-28.9%	270	9.2%	7.6-10.7%	
30 days	146	4.5%	3.5-5.5%	10	12.8%	0.0-26.0%	136	4.3%	3.3-5.3%	
50-64 years										0.3
0 (zero) days	1770	69.9%	67.7-72.2%	179	64.8%	57.7-71.8%	1591	70.4%	68.1-72.8%	
1-2 days	229	8.6%	7.3-10.0%	29	9.9%	5.3-14.4%	200	8.5%	7.1-9.9%	
3-7 days	249	8.9%	7.5-10.3%	29	8.3%	4.6-12.0%	220	8.9%	7.5-10.4%	
8-29 days	204	7.4%	6.1-8.7%	24	9.1%	4.9-13.2%	180	7.2%	5.8-8.6%	
30 days	144	5.2%	4.1-6.2%	22	8.0%	3.9-12.1%	122	4.9%	3.8-6.0%	
65-74 years										0.19
0 (zero) days	975	78.4%	75.3-81.5%	188	75.7%	68.1-83.3%	787	78.9%	75.6-82.3%	
1-2 days	89	6.2%	4.7-7.8%	22	9.4%	4.7-14.2%	67	5.5%	4.0-7.1%	
3-7 days	69	6.0%	4.1-7.8%	8	2.9%	0.6-5.2%	61	6.6%	4.5-8.8%	
8-29 days	69	6.1%	4.0-8.1%	18	8.2%	2.6-13.7%	51	5.6%	3.4-7.8%	
30 days	49	3.4%	2.1-4.7%	9	3.8%	0.0-7.7%	40	3.3%	1.9-4.7%	
75 years and older										0.78
0 (zero) days	798	82.2%	79.1-85.3%	210	81.6%	75.2-88.0%	588	82.4%	78.9-86.0%	
1-2 days	54	5.1%	3.4-6.7%	15	5.5%	2.1-8.9%	39	4.9%	3.1-6.7%	
3-7 days	52	5.8%	3.8-7.7%	16	7.4%	2.9-12.0%	36	5.1%	3.1-7.2%	
8-29 days	34	3.7%	2.2-5.3%	8	3.1%	0.0-6.2%	26	4.0%	2.1-5.8%	
30 days	26	3.2%	1.7-4.8%	8	2.4%	0.0-4.7%	18	3.6%	1.7-5.4%	

* Sample by age does not equal the total sample, due to some respondents with missing age

Maryland Cancer Survivor Report, 2009

**TABLE 5-10. NUMBER OF DAYS DURING PAST 30 DAYS THAT MENTAL HEALTH WAS REPORTED AS 'NOT GOOD,'
BY CANCER SURVIVOR STATUS AND DEMOGRAPHIC CHARACTERISTICS**

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Sex										
Male										0.23
0 (zero) days	2257	70.9%	68.4-73.5%	258	71.3%	63.0-79.6%	1999	70.9%	68.2-73.6%	
1-7 days	439	18.1%	15.9-20.3%	44	13.6%	9.0-18.3%	395	18.4%	16.1-20.7%	
8-30 days	300	11.0%	9.2-12.8%	38	15.1%	6.7-23.5%	262	10.7%	8.9-12.5%	
Female										0.12
0 (zero) days	3278	63.0%	61.0-65.0%	391	65.9%	60.6-71.2%	2887	62.8%	60.7-64.9%	
1-7 days	1057	22.9%	21.1-24.7%	101	18.1%	13.8-22.5%	956	23.3%	21.4-25.2%	
8-30 days	668	14.1%	12.6-15.5%	82	16.0%	11.8-20.2%	586	13.9%	12.4-15.5%	
Race										
White										0.034
0 (zero) days	4153	65.3%	63.5-67.1%	563	70.8%	66.7-74.8%	3590	64.8%	62.9-66.7%	
1-7 days	1159	21.7%	20.1-23.2%	131	17.3%	13.9-20.6%	1028	22.1%	20.4-23.8%	
8-30 days	730	13.0%	11.7-14.4%	97	12.0%	9.0-14.9%	633	13.1%	11.7-14.6%	
African American or Black										0.41
0 (zero) days	905	70.7%	67.3-74.1%	54	65.4%	52.2-78.5%	851	70.9%	67.5-74.4%	
1-7 days	221	17.6%	14.7-20.6%	10	16.9%	5.7-28.2%	211	17.7%	14.7-20.7%	
8-30 days	160	11.6%	9.4-13.9%	17	17.7%	7.9-27.5%	143	11.4%	9.1-13.7%	
Other										<0.0001
0 (zero) days	380	65.5%	59.6-71.5%	21	49.4%	22.5-76.4%	359	66.3%	60.3-72.3%	
1-7 days	98	22.1%	16.9-27.3%	1	4.4%	0-13.0%	97	22.9%	17.5-28.3%	
8-30 days	62	12.3%	8.2-16.5%	6	46.2%	17.8-74.5%	56	10.8%	6.9-14.7%	

Total number of responses may not equal sample
total due to missing data for some characteristics

TABLE 5-10. NUMBER OF DAYS DURING PAST 30 DAYS THAT MENTAL HEALTH WAS REPORTED AS 'NOT GOOD,' BY CANCER SURVIVOR STATUS AND DEMOGRAPHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Education										
Less than high school										0.32
0 (zero) days	296	50.9%	43.2-58.6%	39	63.7%	48.1-79.3%	257	49.9%	41.7-58.1%	
1-7 days	98	26.3%	18.6-34.0%	13	17.7%	6.0-29.4%	85	26.9%	18.8-35.1%	
8-30 days	100	22.8%	16.2-29.4%	11	18.6%	5.1-32.0%	89	23.1%	16.1-30.2%	
High school grad or GED										0.087
0 (zero) days	1434	68.6%	65.4-71.9%	155	59.4%	50.6-68.2%	1279	69.3%	65.9-72.7%	
1-7 days	346	17.7%	15.1-20.3%	41	20.9%	13.4-28.4%	305	17.4%	14.7-20.2%	
8-30 days	280	13.7%	11.3-16.1%	41	19.7%	12.2-27.3%	239	13.3%	10.8-15.8%	
Some college 1-3 years										0.023
0 (zero) days	1243	63.0%	59.4-66.5%	160	67.3%	56.9-77.6%	1083	62.6%	58.9-66.4%	
1-7 days	359	22.0%	18.8-25.2%	31	11.2%	5.9-16.4%	328	22.9%	19.5-26.3%	
8-30 days	275	15.0%	12.4-17.6%	33	21.6%	11.2-32.0%	242	14.5%	11.9-17.2%	
College grad or more										0.49
0 (zero) days	2538	70.3%	68.1-72.4%	293	73.6%	66.6-80.5%	2245	70.0%	67.8-72.2%	
1-7 days	688	20.5%	18.6-22.3%	60	16.4%	11.6-21.2%	628	20.8%	18.9-22.8%	
8-30 days	313	9.3%	7.8-10.7%	35	10.0%	3.7-16.3%	278	9.2%	7.8-10.6%	
Area of Residence										
Urban										0.13
0 (zero) days	2860	66.2%	64.2-68.2%	318	69.1%	63.1-75.1%	2542	66.0%	63.9-68.1%	
1-7 days	841	20.9%	19.2-22.7%	67	15.7%	11.7-19.7%	774	21.3%	19.5-23.2%	
8-30 days	502	12.8%	11.4-14.3%	53	15.2%	9.5-20.8%	449	12.6%	11.2-14.1%	
Rural										0.05
0 (zero) days	2617	68.8%	66.7-71.0%	328	66.2%	60.5-71.9%	2289	69.1%	66.8-71.3%	
1-7 days	643	18.9%	17.1-20.7%	77	16.7%	12.6-20.7%	566	19.1%	17.1-21.0%	
8-30 days	462	12.3%	10.8-13.8%	67	17.2%	12.0-22.3%	395	11.9%	10.3-13.4%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 5-11. AMONG CANCER SURVIVORS, NUMBER OF DAYS DURING PAST 30 DAYS THAT MENTAL HEALTH WAS REPORTED AS 'NOT GOOD,' BY DEMOGRAPHIC CHARACTERISTICS

	Cancer Survivors			
	N	wt %	95% CI	P-value
Sex				0.51
Male				
0 (zero) days	258	71.3%	63.0-79.6%	
1-7 days	44	13.6%	9.0-18.3%	
8-30 days	38	15.1%	6.7-23.5%	
Female				
0 (zero) days	391	65.9%	60.6-71.2%	
1-7 days	101	18.1%	13.8-22.5%	
8-30 days	82	16.0%	11.8-20.2%	
Age				<.0001
18-49				
0 (zero) days	68	48.7%	35.3-62.2%	
1-7 days	26	21.6%	12.0-31.2%	
8-30 days	29	29.6%	14.4-44.9%	
50-64				
0 (zero) days	179	64.8%	57.7-71.8%	
1-7 days	58	18.2%	12.5-23.8%	
8-30 days	46	17.1%	11.5-22.7%	
65-74				
0 (zero) days	188	75.7%	68.1-83.3%	
1-7 days	30	12.4%	7.1-17.6%	
8-30 days	27	11.9%	5.4-18.5%	
75 years and older				
0 (zero) days	210	81.6%	75.2-88.0%	
1-7 days	31	12.9%	7.4-18.4%	
8-30 days	16	5.5%	1.6-9.3%	
Race				0.008
White				
0 (zero) days	563	70.8%	66.7-74.9%	
1-7 days	131	17.3%	13.9-20.7%	
8-30 days	97	12.0%	9.0-14.9%	
Non-white				
0 (zero) days	75	59.5%	45.6-73.5%	
1-7 days	11	12.4%	4.2-20.5%	
8-30 days	23	28.1%	13.7-42.5%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 5-11. AMONG CANCER SURVIVORS, NUMBER OF DAYS DURING PAST 30 DAYS THAT MENTAL HEALTH WAS REPORTED AS 'NOT GOOD,' BY DEMOGRAPHIC CHARACTERISTICS

Education				0.065
Less than high school				
0 (zero) days	39	63.7%	48.1-79.3%	
1-7 days	13	17.7%	6.0-29.5%	
8-30 days	11	18.6%	5.0-32.1%	
High school grad or GED				
0 (zero) days	155	59.4%	50.6-68.2%	
1-7 days	41	20.9%	13.4-28.4%	
8-30 days	41	19.7%	12.2-27.3%	
Some college 1-3 years				
0 (zero) days	160	67.3%	56.9-77.6%	
1-7 days	31	11.2%	5.9-16.4%	
8-30 days	33	21.6%	11.1-32.0%	
College grad or more				
0 (zero) days	293	73.6%	66.7-80.5%	
1-7 days	60	16.4%	11.6-21.2%	
8-30 days	35	10.0%	3.7-16.3%	
Area of Residence				0.78
Urban				
0 (zero) days	318	69.1%	63.1-75.1%	
1-7 days	67	15.7%	11.6-19.7%	
8-30 days	53	15.2%	9.5-20.8%	
Rural				
0 (zero) days	328	66.2%	60.5-71.9%	
1-7 days	77	16.7%	12.6-20.7%	
8-30 days	67	17.2%	12.1-22.2%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 5-12. AMONG CANCER SURVIVORS, NUMBER OF DAYS DURING PAST 30 DAYS THAT MENTAL HEALTH WAS REPORTED AS 'NOT GOOD,' BY YEARS SINCE CANCER DIAGNOSIS

Days	Total			0-5 Years since Diagnosis			6-10 Years since Diagnosis			11 Years or More since Diagnosis			P-value
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	
0 (zero) days	632	69.5%	65.1-73.9%	206	66.7%	59.9-73.6%	142	71.0%	59.5-82.4%	284	70.9%	64.7-77.1%	0.45
1-7 days	142	16.3%	13.1-19.6%	52	18.3%	12.7-23.8%	21	11.2%	5.1-17.3%	69	17.5%	12.3-22.6%	
8-30 days	115	14.1%	10.4-17.9%	47	15.0%	9.7-20.3%	24	17.8%	6.3-29.3%	44	11.6%	7.2-16.1%	

Maryland Cancer Survivor Report, 2009

TABLE 5-13. NUMBER OF DAYS DURING PAST 30 DAYS THAT POOR PHYSICAL OR MENTAL HEALTH PREVENTED USUAL ACTIVITIES, BY CANCER SURVIVOR STATUS AND AGE GROUP

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Sample										<0.0001
0 (zero) days	6310	78.5%	77.1-79.9%	668	70.4%	65.8-74.9%	5642	79.1%	77.7-80.6%	
1-2 days	509	8.0%	7.0-9.0%	47	5.4%	3.5-7.3%	462	8.2%	7.1-9.3%	
3-7 days	527	6.2%	5.4-7.0%	75	8.6%	5.3-11.9%	452	6.0%	5.2-6.8%	
8-29 days	433	4.7%	4.0-5.3%	73	8.9%	5.7-12.1%	360	4.4%	3.7-5.0%	
30 days	272	2.6%	2.2-3.0%	57	6.6%	4.4-8.8%	215	2.3%	1.9-2.7%	
18-49 years										0.0002
0 (zero) days	2382	77.3%	75.2-79.4%	84	57.0%	42.9-71.0%	2298	77.8%	75.7-80.0%	
1-2 days	282	10.4%	8.8-12.0%	10	8.8%	2.6-14.9%	272	10.5%	8.8-12.1%	
3-7 days	224	6.5%	5.3-7.8%	15	17.1%	4.0-30.2%	209	6.2%	5.0-7.4%	
8-29 days	146	4.1%	3.2-5.1%	7	10.7%	0-22.4%	139	4.0%	3.0-4.9%	
30 days	67	1.7%	1.2-2.2%	9	6.5%	1.5-11.5%	58	1.5%	1.0-2.0%	
50-64 years										0.003
0 (zero) days	2015	78.6%	76.6-80.5%	190	69.4%	62.8-76.1%	1825	79.4%	77.4-81.5%	
1-2 days	159	6.1%	4.9-7.2%	20	7.0%	3.4-10.6%	139	6.0%	4.8-7.2%	
3-7 days	177	6.1%	5.0-7.2%	23	7.1%	3.4-10.8%	154	6.0%	4.8-7.1%	
8-29 days	152	5.3%	4.3-6.4%	26	7.8%	4.2-11.4%	126	5.1%	4.0-6.2%	
30 days	107	3.9%	3.0-4.9%	24	8.6%	4.5-12.8%	83	3.5%	2.6-4.4%	
65-74 years										0.46
0 (zero) days	1030	82.6%	79.9-85.2%	195	78.5%	71.6-85.4%	835	83.5%	80.6-86.3%	
1-2 days	41	3.0%	2.0-4.1%	9	3.3%	0.9-5.7%	32	3.0%	1.8-4.2%	
3-7 days	69	4.7%	3.3-6.1%	16	4.4%	1.9-7.0%	53	4.8%	3.2-6.4%	
8-29 days	72	5.8%	4.0-7.5%	20	7.9%	3.5-12.4%	52	5.3%	3.4-7.1%	
30 days	54	3.9%	2.5-5.4%	11	5.8%	0.7-10.9%	43	3.5%	2.2-4.8%	
75 years and older										0.23
0 (zero) days	788	81.4%	78.2-84.5%	196	75.6%	68.8-82.5%	592	83.4%	80.0-86.9%	
1-2 days	23	2.2%	1.0-3.3%	8	2.8%	0.1-5.5%	15	1.9%	0.7-3.2%	
3-7 days	54	5.8%	3.9-7.7%	20	7.2%	3.5-10.8%	34	5.3%	3.1-7.5%	
8-29 days	61	6.2%	4.2-8.1%	18	9.3%	4.2-14.3%	43	5.0%	3.2-6.9%	
30 days	43	4.5%	2.9-6.2%	13	5.1%	1.9-8.3%	30	4.3%	2.4-6.2%	

* Sample by age does not equal the total sample, due to some respondents with missing age

TABLE 5-14. NUMBER OF DAYS DURING PAST 30 DAYS THAT POOR PHYSICAL OR MENTAL HEALTH PREVENTED USUAL ACTIVITIES, BY CANCER SURVIVOR STATUS AND DEMOGRAPHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Sex										
Male										<0.0001
0 (zero) days	2407	79.6%	77.4-81.8%	262	70.5%	62.3-78.6%	2145	80.3%	78.0-82.6%	
1-7 days	358	14.0%	12.0-16.0%	34	12.3%	5.6-19.1%	324	14.2%	12.1-16.3%	
8-30 days	256	6.3%	5.2-7.4%	50	17.2%	10.6-23.9%	206	5.5%	4.5-6.6%	
Female										0.0002
0 (zero) days	3903	77.4%	75.7-79.1%	406	70.3%	65.4-75.3%	3497	78.0%	76.3-79.8%	
1-7 days	678	14.3%	12.9-15.8%	88	15.5%	11.6-19.3%	590	14.2%	12.7-15.8%	
8-30 days	449	8.2%	7.2-9.3%	80	14.2%	10.4-18.0%	369	7.7%	6.6-8.8%	
Race										
White										<0.0001
0 (zero) days	4746	77.6%	76.1-79.1%	581	72.5%	68.6-76.5%	4165	78.1%	76.5-79.8%	
1-7 days	800	14.8%	13.4-16.1%	106	12.9%	10.1-15.7%	694	15.0%	13.5-16.4%	
8-30 days	535	7.6%	6.8-8.5%	109	14.5%	11.3-17.8%	426	6.9%	6.0-7.8%	
African American or Black										0.09
0 (zero) days	1045	82.5%	79.8-85.2%	57	76.2%	65.8-86.6%	988	82.8%	80.0-85.6%	
1-7 days	141	11.2%	8.8-13.7%	10	11.0%	3.3-18.8%	131	11.2%	8.7-13.8%	
8-30 days	108	6.3%	4.9-7.7%	14	12.8%	5.2-20.3%	94	6.0%	4.6-7.4%	
Other										0.003
0 (zero) days	405	74.1%	68.8-79.3%	18	38.2%	15.1-61.2%	387	75.6%	70.5-80.8%	
1-7 days	81	17.7%	13.0-22.3%	4	30.5%	2.0-59.1%	77	17.1%	12.5-21.7%	
8-30 days	55	8.3%	5.2-11.3%	6	31.3%	4.7-57.9%	49	7.3%	4.4-10.1%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 5-14. NUMBER OF DAYS DURING PAST 30 DAYS THAT POOR PHYSICAL OR MENTAL HEALTH PREVENTED USUAL ACTIVITIES, BY CANCER SURVIVOR STATUS AND DEMOGRAPHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Education										
Less than high school										0.44
0 (zero) days	345	66.4%	58.9-73.9%	45	66.7%	52.6-80.8%	300	66.4%	58.4-74.4%	
1-7 days	68	19.6%	12.7-26.6%	10	13.6%	3.6-23.6%	58	20.1%	12.6-27.6%	
8-30 days	91	13.9%	9.1-18.8%	14	19.7%	7.8-31.6%	77	13.5%	8.3-18.6%	
High school grad or GED										<0.0001
0 (zero) days	1603	78.3%	75.5-81.0%	155	58.5%	49.9-67.1%	1448	79.7%	76.9-82.5%	
1-7 days	228	12.4%	10.1-14.7%	34	16.2%	9.8-22.6%	194	12.1%	9.7-14.5%	
8-30 days	238	9.4%	7.7-11.0%	50	25.3%	17.5-33.2%	188	8.2%	6.5-9.8%	
Some college 1-3 years										0.007
0 (zero) days	1485	78.0%	75.0-81.0%	170	74.0%	63.7-84.2%	1315	78.3%	75.2-81.4%	
1-7 days	236	14.0%	11.4-16.7%	24	9.2%	4.1-14.2%	212	14.4%	11.6-17.2%	
8-30 days	176	8.0%	6.3-9.6%	28	16.9%	6.8-26.9%	148	7.3%	5.7-8.9%	
College grad or more										0.019
0 (zero) days	2849	80.6%	78.8-82.4%	296	74.8%	68.0-81.6%	2553	81.0%	79.2-82.9%	
1-7 days	502	14.5%	12.8-16.1%	54	15.8%	9.2-22.3%	448	14.4%	12.7-16.1%	
8-30 days	200	5.0%	4.1-5.8%	38	9.4%	5.8-13.1%	162	4.6%	3.7-5.5%	
Area of Residence										
Urban										<0.0001
0 (zero) days	3303	78.4%	76.7-80.1%	326	71.2%	65.4-77.0%	2977	79.0%	77.2-80.7%	
1-7 days	577	14.4%	12.9-15.9%	57	13.5%	8.8-18.2%	520	14.5%	12.9-16.1%	
8-30 days	351	7.2%	6.2-8.1%	61	15.3%	10.6-19.9%	290	6.5%	5.6-7.5%	
Rural										<0.0001
0 (zero) days	2949	79.0%	77.2-80.8%	339	67.7%	61.9-73.4%	2610	80.0%	78.1-81.9%	
1-7 days	447	13.1%	11.5-14.6%	64	15.6%	10.9-20.2%	383	12.8%	11.2-14.5%	
8-30 days	347	7.9%	6.9-9.0%	69	16.8%	12.1-21.4%	278	7.1%	6.1-8.2%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 5-15. AMONG CANCER SURVIVORS, NUMBER OF DAYS DURING PAST 30 DAYS THAT POOR PHYSICAL OR MENTAL HEALTH PREVENTED USUAL ACTIVITIES, BY DEMOGRAPHIC CHARACTERISTICS

	N	wt %	95% CI	P-value
Sex				0.6
Male				
0 (zero) days	262	70.5%	62.3-78.6%	
1-7 days	34	12.3%	5.6-19.1%	
8-30 days	50	17.2%	10.5-23.9%	
Female				
0 (zero) days	406	70.3%	65.4-75.3%	
1-7 days	88	15.5%	11.6-19.3%	
8-30 days	80	14.2%	10.4-18.1%	
Age				0.011
18-49				
0 (zero) days	84	57.0%	42.9-71.0%	
1-7 days	25	25.8%	12.4-39.3%	
8-30 days	16	17.2%	5.1-29.3%	
50-64				
0 (zero) days	190	69.4%	62.8-76.1%	
1-7 days	43	14.1%	9.1-19.1%	
8-30 days	50	16.4%	11.1-21.7%	
65-74				
0 (zero) days	195	78.5%	71.6-85.4%	
1-7 days	25	7.8%	4.3-11.2%	
8-30 days	31	13.7%	7.3-20.2%	
75 years and older				
0 (zero) days	196	75.6%	68.7-82.5%	
1-7 days	28	10.0%	5.5-14.5%	
8-30 days	31	14.4%	8.6-20.2%	
Race				0.37
White				
0 (zero) days	581	72.5%	68.6-76.5%	
1-7 days	106	12.9%	10.1-15.7%	
8-30 days	109	14.5%	11.3-17.8%	
Non-white				
0 (zero) days	75	62.5%	48.7-76.3%	
1-7 days	14	18.1%	5.6-30.5%	
8-30 days	20	19.4%	8.0-30.9%	

Total number of responses may not equal sample total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

	N	wt %	95% CI	P-value
Education				0.009
Less than high school				
0 (zero) days	45	66.7%	52.5-80.8%	
1-7 days	10	13.6%	3.6-23.6%	
8-30 days	14	19.7%	7.7-31.7%	
High school grad or GED				
0 (zero) days	155	58.5%	49.9-67.1%	
1-7 days	34	16.2%	9.8-22.6%	
8-30 days	50	25.3%	17.5-33.2%	
Some college 1-3 years				
0 (zero) days	170	74.0%	63.7-84.3%	
1-7 days	24	9.2%	4.1-14.2%	
8-30 days	28	16.9%	6.8-27.0%	
College grad or more				
0 (zero) days	296	74.8%	68.0-81.6%	
1-7 days	54	15.8%	9.2-22.3%	
8-30 days	38	9.4%	5.8-13.1%	
Area of Residence				0.71
Urban				
0 (zero) days	326	71.2%	65.4-77.1%	
1-7 days	57	13.5%	8.8-18.2%	
8-30 days	61	15.3%	10.6-19.9%	
Rural				
0 (zero) days	339	67.7%	61.9-73.5%	
1-7 days	64	15.6%	10.9-20.2%	
8-30 days	69	16.8%	12.1-21.4%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 5-16. AMONG CANCER SURVIVORS, NUMBER OF DAYS DURING PAST 30 DAYS THAT POOR PHYSICAL OR MENTAL HEALTH PREVENTED USUAL ACTIVITIES, BY YEARS SINCE CANCER DIAGNOSIS

Days	Total			0-5 Years since Diagnosis			6-10 Years since Diagnosis			11 Years or More since Diagnosis			P-value
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	
0 (zero) days	647	71.2%	67.0-75.5%	211	67.8%	61.0-74.6%	139	67.4%	56.3-78.5%	297	76.0%	70.4-81.5%	0.28
1-7 days	119	12.9%	10.1-15.7%	50	16.6%	11.2-22.1%	26	14.1%	7.7-20.5%	43	9.3%	6.0-12.7%	
8-30 days	126	15.8%	12.1-19.6%	45	15.6%	10.3-20.8%	25	18.5%	7.2-29.7%	56	14.7%	9.9-19.5%	

Maryland Cancer Survivor Report, 2009

Section 6
Health Care Access

Continuity of care following primary cancer treatment is a key determinant of long-term health outcomes for cancer survivors. The following aspects of health care access for cancer survivors in Maryland are examined in this chapter:

- Health care coverage
- Having at least one health care provider or personal doctor
- Routine physical examination in the past year
- Influenza vaccination in the past year

Health Care Coverage

Costs for continuing care after initial cancer treatment can be substantial. While most Marylanders have health insurance coverage, 8.7% of cancer survivors and 11.2% of adults without a history of cancer in the 2009 Maryland BRFSS reported having no health care insurance (Table 6-1). The lack of health care coverage can have serious consequences for cancer survivors and their families. It has been shown that the uninsured, as a group, have poorer health and are more likely to die early than persons with coverage.[1] As cited in the IOM report *From Cancer Patient to Cancer Survivor: Lost in Transition,* several studies show an association between lack of health insurance and poorer cancer outcomes, including survival.[2]

The following summarizes Maryland BRFSS findings related to health insurance coverage by cancer survivors.

- In Maryland, 91.3% cancer survivors and 88.8% of persons without a history of cancer reported having some form of health insurance (Table 6.1). The difference between these groups in the proportion with coverage was not statistically significant in any age group.
- Statistically significant increases in health insurance status between cancer survivors and persons without a history of cancer were found only for those of white race (95.5% compared to 92.7%) and those adults with a high school education or general equivalency degree (94.7% compared to 81.8%) (Table 6-2).
  - o No statistically significant differences between cancer survivors and those without a history of cancer were found by age, gender, or area of residence (urban/rural) (Tables 6.1 and 6.2).
- Among cancer survivors, health insurance status did not differ significantly by sex, education, or area of residence (Table 6-3).
  - o The younger population (age 18-49 years) had a higher proportion without health insurance compared to the other age groups.
  - o When examined by race, a higher proportion of non-whites had no health insurance (22.3%) compared to whites (4.5%).
- Among cancer survivors, health insurance status did not differ significantly by number of years since cancer diagnosis (Table 6-4).

Having a Primary Health Care Provider

One of the key barriers to health care access faced by cancer survivors is the lack of a focal point for follow-up care. While survivorship care can be provided by either specialists or primary health care providers (HCP), and different models exist for delivering this care, optimally the cancer survivor has a designated provider within the health care system responsible for coordinating their care. In the 2009 Maryland BRFSS,

- 92.8% of cancer survivors reported having at least one person they think of as their personal doctor or primary HCP, compared to 84.8% of persons without a history of cancer. This difference between cancer survivors and others was statistically significant (Table 6-5).
- For many demographic characteristics, a higher proportion of cancer survivors (compared to persons without cancer) reported having a primary HCP (Table 6-6). This was true for males, females, whites, persons of all educational levels except some college, and persons living in both urban and rural areas.
    - The differences between cancer survivors and others were not statistically significant for persons of non-white race, persons with 1-3 years of college, or any age groups.
- Among cancer survivors, the proportion reporting to have a primary HCP did not differ by sex, race, education, or area of residence (Table 6-7).
    - A higher proportion of the youngest age group (age 18-49 years) reported being without a HCP compared to survivors age 65 years and older.
- Among cancer survivors, the proportion who responded that they have at least one HCP did not differ significantly by number of years since cancer diagnosis (Table 6.8).

Time since Last Physical Examination

In addition to cancer-related follow-up care, cancer survivors also need routine physical examinations for prevention and treatment of other chronic conditions. Cancer survivors are living longer after their initial diagnosis, and are at increased risk for conditions such as osteoporosis, heart disease, and diabetes.[2]

A recent study on use of preventive health services by cancer survivors (with one year of follow up) in the U.S. population found that a large majority (78%) had undergone a routine physical examination in the past year.[3] In the 2009 Maryland BRFSS, 86.2% of cancer survivors stated they had visited a doctor within the past year for a routine checkup (Table 6-9).

In addition, the Maryland BRFSS found that:

- As a group, cancer survivors were significantly more likely to have visited a doctor within the past year for a routine checkup than persons without cancer (86.2% vs. 73.5%, respectively).
    - When stratified by age, the difference between survivors and those without a history of cancer was statistically significant only for persons age 50 to 64 years.

- The difference between cancer survivors and others was statistically significant among males and females, all race groups examined, all education levels, and both urban and rural residents (Table 6-10).
- Among cancer survivors, the proportion reporting having a physical examination within the past year did not differ statistically by sex or area of residence (Table 6-11).
  - A lower proportion the younger cancer survivors (18-49 years) reported having a physical examination within the last year compared to survivors age 65 years and older.
  - A higher proportion of non-white cancer survivors reported having a physical examination within the last year compared to whites (93.8% vs. 83.8%).
- Among cancer survivors, the proportion having a physical exam in the past year did not differ significantly by number of years since cancer diagnosis (Table 6-12).

Influenza Immunization

While it is not known whether cancer survivors are at greater risk of infection with the influenza virus, it is known that cancer survivors (and cancer patients) are at increased risk for developing influenza-related complications, leading to hospitalization and death.[4] Beginning with the 2010-2011 influenza season, the CDC and Advisory Committee on Immunization Practices (ACIP) now recommend annual vaccination against influenza for all persons age 6 months and older.[5] According to ACIP, this 'expansion of vaccination recommendations reflects the need to remove potential barriers to receipt of influenza vaccine, including lack of awareness about vaccine indications among persons at higher risk for influenza complications and their close contacts.' Although cancer patients and cancer survivors are known to be at increased risk of complications from influenza, recent studies have shown lower rates of influenza vaccination among cancer survivors compared to persons without a history of cancer.[6,7,8]

- Unlike the studies cited above, the Maryland BRFSS found that the rate of self-reported influenza vaccination in the past 12 months was significantly higher among cancer survivors than among persons without a history of cancer (61.5% vs. 41.8%; Table 6-13). Significant differences in vaccination prevalence were observed across almost all demographic groups.
  - The only age group with statistically significant differences between cancer survivors and others was those age 50 to 64 years (Table 6-13).
  - Statistically significant differences between cancer survivors and persons without cancer were seen for males, females, whites, African Americans, all education levels, and both urban and rural residents, with survivors reporting higher influenza vaccination prevalence (Table 6-14).
- Among cancer survivors, no statistically significant differences for reporting receiving influenza vaccine were found by sex, education, or area of residence (Table 6-15).
  - The percentage of cancer survivors who reported receiving the influenza vaccination increased with age, from 39.3% for those 18-49 years to 75.4% among those 75 years and older.
  - A higher proportion of white cancer survivors reported receiving the influenza vaccination than non-white survivors (66.6% vs. 44.8%).

- Among cancer survivors, the proportion receiving an influenza vaccine did not differ significantly by number of years since cancer diagnosis (Table 6-16).

Summary

According to the 2009 BRFSS, 91% of cancer survivors in Maryland have some form of health care coverage. Cancer survivors appear to be as likely to have health care coverage as persons without a cancer history. However, among cancer survivors, evidence was found for age and racial disparities in health care coverage. Survivors who were younger (age 18-49 years) were significantly less likely to have insurance than older survivors and non-white cancer survivors were less likely than white survivors to have coverage (77.7% vs. 95.5%, respectively).

Cancer survivors in Maryland were more likely than persons without a cancer history to have at least one HCP (92.8 vs. 84.8%, respectively) and to have had a routine physical checkup in the past year (86.2% vs. 73.5%). Among cancer survivors, those who were not white (African American or other non-white race) were more likely to report having had a routine checkup in the past year than whites.

The time elapsed since cancer diagnosis did not have a significant impact on the proportion of cancer survivors who had health insurance, a primary HCP, or a routine checkup in the past year.

In contrast to recently published studies, cancer survivors in Maryland were more likely than persons without a cancer history to have received an influenza vaccine in the past 12 months. White cancer survivors were more likely than non-whites to have been vaccinated. The proportion of cancer survivors vaccinated increased with increasing age, ranging from 39.3% for those age 18-49 years to 75.4% among those age 75 years and older.

---

[1] Committee on Health Insurance Status and Its Consequences, Institute of Medicine. America's uninsured crisis: consequences for health and health care. Washington, DC: The National Academies Press; 2009.

[2] Hewitt M, Greenfield S, Stovall E, eds. From cancer patient to cancer survivor: lost in transition. Washington, DC: The National Academies Press, 2006.

[3] Findley PA and U. Sambamoorthi. Preventive health services and lifestyle practices in cancer survivors: a population health investigation. J Cancer Surviv 2009;3:43-58.

[4] Centers for Disease Control and Prevention. Cancer, the Flu, and You. Available at http://www.cdc.gov/cancer/flu/#. Accessed March 7, 2011.

[5] Centers for Disease Control and Prevention. MMWR Recommendations and Reports. Prevention and control of influenza with vaccines. Recommendations of the Advisory Committee on Immunization Practices (ACIP). August 6, 2010 / 59(rr08);1-62. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5908a1.htm. Accessed March 7, 2011.

[6] Shih Y and Pan I. Influenza vaccination among individuals with cancer and their family members. Am J Prev Med 2010;38(1):61-69.

[7] Snyder CF, Earle CC, Herbert RJ, et al. Trends in follow-up and preventive care for colorectal cancer survivors. J Gen Intern Med 2008;23(3):254-9.

[8] Snyder CF, Frick KD, Peairs KS, et al. Comparing care for breast cancer survivors to non-cancer control: a five-year longitudinal study. J Gen Intern Med 2009;24(4):469-74.

TABLE 6-1. HEALTH CARE COVERAGE, BY CANCER SURVIVOR STATUS AND AGE GROUP

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Sample										0.31
Yes	7503	89.0%	87.7-90.3%	890	91.3%	87.2-95.5%	6613	88.8%	87.4-90.2%	
No	612	11.0%	9.7-12.3%	44	8.7%	4.5-12.8%	568	11.2%	9.8-12.6%	
18-49 years										0.16
Yes	2741	84.7%	82.6-86.9%	109	75.5%	59.9-91.2%	2632	85.0%	82.8-87.1%	
No	365	15.3%	13.1-17.4%	16	24.5%	8.8-40.1%	349	15.0%	12.9-17.2%	
50-64 years										0.8
Yes	2423	92.8%	91.4-94.2%	268	92.2%	87.9-96.5%	2155	92.8%	91.3-94.3%	
No	204	7.2%	5.8-8.6%	19	7.8%	3.5-12.1%	185	7.2%	5.7-8.7%	
65-74 years										0.85
Yes	1260	99.1%	98.5-99.7%	248	98.9%	97.2-100.0%	1012	99.1%	98.5-99.7%	
No	15	0.9%	0.3-1.5%	3	1.1%	0.0-2.8%	12	0.9%	0.3-1.5%	
75 years and older										0.46
Yes	976	97.1%	95.4-98.7%	258	96.0%	92.1-99.9%	718	97.4%	95.6-99.2%	
No	22	2.9%	1.3-4.6%	6	4.0%	0.1-7.9%	16	2.6%	0.8-4.4%	

* Sample by age does not equal the total sample, due to some respondents with missing age   Maryland Cancer Survivor Report, 2009

TABLE 6-2. HEALTH CARE COVERAGE, BY CANCER SURVIVOR STATUS AND DEMOGRAPHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Sex										
Male										0.69
Yes	2774	86.4%	84.1-88.8%	334	88.2%	79.8-96.5%	2440	86.3%	83.8-88.7%	
No	261	13.6%	11.2-15.9%	16	11.8%	3.5-20.2%	245	13.7%	11.3-16.2%	
Female										0.16
Yes	4729	91.4%	90.1-92.7%	556	93.8%	90.9-96.8%	4173	91.2%	89.8-92.6%	
No	351	8.6%	7.3-9.9%	28	6.2%	3.2-9.1%	323	8.8%	7.4-10.2%	
Race										
White										0.033
Yes	5774	92.9%	91.9-94.0%	779	95.5%	93.6-97.5%	4995	92.7%	91.5-93.8%	
No	349	7.1%	6.0-8.1%	28	4.5%	2.5-6.4%	321	7.3%	6.2-8.5%	
African American or Black										0.4
Yes	1148	86.5%	83.5-89.4%	74	90.8%	82.2-99.4%	1074	86.3%	83.2-89.3%	
No	155	13.5%	10.6-16.5%	9	9.2%	0.6-17.8%	146	13.7%	10.7-16.8%	
Other										0.056
Yes	451	77.3%	71.5-83.0%	22	54.3%	25.8-82.7%	429	78.3%	72.5-84.1%	
No	97	22.7%	17.0-28.5%	6	45.7%	17.3-74.2%	91	21.7%	15.9-27.6%	
Education										
Less than high school										0.078
Yes	433	74.0%	66.9-81.1%	65	87.5%	76.2-98.9%	368	72.8%	65.2-80.5%	
No	87	26.0%	18.9-33.1%	6	12.5%	1.1-23.8%	81	27.2%	19.5-34.8%	
High school grad or GED										<0.0001
Yes	1839	82.7%	79.5-85.9%	228	94.7%	91.4-98.0%	1611	81.8%	78.4-85.3%	
No	251	17.3%	14.1-20.5%	14	5.3%	2.0-8.6%	237	18.2%	14.7-21.6%	
Some college 1-3 years										0.28
Yes	1766	88.7%	86.0-91.4%	214	83.7%	72.9-94.6%	1552	89.1%	86.3-91.9%	
No	143	11.3%	8.6-14.0%	14	16.3%	5.4-27.1%	129	10.9%	8.1-13.7%	
College grad or more										0.88
Yes	3436	94.8%	93.3-96.2%	381	94.4%	88.1-100.0%	3055	94.8%	93.3-96.3%	
No	130	5.2%	3.8-6.7%	10	5.6%	0.0-11.9%	120	5.2%	3.7-6.7%	
Area of Residence										
Urban										0.61
Yes	3976	89.4%	87.8-91.0%	426	90.9%	85.5-96.2%	3550	89.3%	87.6-91.0%	
No	289	10.6%	9.0-12.2%	22	9.1%	3.8-14.5%	267	10.7%	9.0-12.4%	
Rural										0.14
Yes	3463	88.6%	86.9-90.4%	460	92.5%	88.1-96.9%	3003	88.3%	86.4-90.2%	
No	307	11.4%	9.6-13.1%	22	7.5%	3.1-11.9%	285	11.7%	9.8-13.6%	

Total number of responses may not equal sample total due to missing data for some characteristics

TABLE 6-3. HEALTH CARE COVERAGE AMONG CANCER SURVIVORS, BY DEMOGRAPHIC CHARACTERISTICS

	N	wt %	95% CI	P-value
Sex				0.13
Male				
Yes	334	88.2%	79.8-96.5%	
No	16	11.8%	3.5-20.2%	
Female				
Yes	556	93.8%	90.8-96.8%	
No	28	6.2%	3.2-9.2%	
Age				<.0001
18-49				
Yes	109	75.5%	59.8-91.3%	
No	16	24.5%	8.7-40.2%	
50-64				
Yes	268	92.2%	87.9-96.5%	
No	19	7.8%	3.5-12.1%	
65-74				
Yes	248	98.9%	97.2-100%	
No	3	1.1%	0-2.8%	
75 years and older				
Yes	258	96.0%	92.1-99.9%	
No	6	4.0%	0.1-7.9%	
Race				<.0001
White				
Yes	779	95.5%	93.6-97.5%	
No	28	4.5%	2.5-6.4%	
Non-white				
Yes	96	77.7%	63.1-92.3%	
No	15	22.3%	7.7-36.9%	
Education				0.073
Less than high school				
Yes	65	87.5%	76.2-98.9%	
No	6	12.5%	1.1-23.8%	
High school grad or GED				
Yes	228	94.7%	91.4-98.0%	
No	14	5.3%	2.0-8.6%	
Some college 1-3 years				
Yes	214	83.7%	72.9-94.6%	
No	14	16.3%	5.4-27.1%	
College grad or more				
Yes	381	94.4%	88.1-100.0%	
No	10	5.6%	0.0-11.9%	
Area of Residence				0.64
Urban				
Yes	426	90.9%	85.5-96.2%	
No	22	9.1%	3.8-14.5%	
Rural				
Yes	460	92.5%	88.1-96.9%	
No	22	7.5%	3.1-11.9%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Marryland Cancer Survivor Report, 2009

TABLE 6-4. HEALTH CARE COVERAGE AMONG CANCER SURVIVORS, BY YEARS SINCE CANCER DIAGNOSIS

Health insurance	Total			0-5 Years since Diagnosis			6-10 Years since Diagnosis			11 Years or More since Diagnosis			P-value
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	
Yes	863	92.9%	89.6-96.3%	292	89.5%	83.9-95.1%	184	91.0%	79.8-100.0%	387	96.6%	94.4-98.8%	0.17
No	40	7.1%	3.7-10.4%	19	10.5%	4.9-16.1%	6	9.0%	0.0-20.2%	15	3.4%	1.2-5.6%	

Maryland Cancer Survivor Report, 2009

TABLE 6-5. PEOPLE REPORTING TO HAVE AT LEAST ONE PERSON THEY THINK OF AS THEIR PERSONAL DOCTOR OR HEALTH CARE PROVIDER, BY CANCER SURVIVOR STATUS AND AGE GROUP

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Sample										0.0007
Yes	7322	85.4%	84.1-86.8%	893	92.8%	89.5-96.0%	6429	84.8%	83.4-86.3%	
No	799	14.6%	13.2-15.9%	41	7.2%	4.0-10.5%	758	15.2%	13.7-16.6%	
18-49 years										0.62
Yes	2626	80.0%	77.8-82.2%	114	83.4%	70.7-96.2%	2512	79.9%	77.7-82.1%	
No	483	20.0%	17.8-22.2%	11	16.6%	3.8-29.3%	472	20.1%	17.9-22.3%	
50-64 years										0.41
Yes	2425	91.3%	89.7-92.8%	275	93.1%	89.0-97.2%	2150	91.1%	89.4-92.7%	
No	206	8.7%	7.2-10.3%	12	6.9%	2.8-11.0%	194	8.9%	7.3-10.6%	
65-74 years										0.18
Yes	1229	95.7%	94.1-97.3%	245	97.6%	95.3-99.9%	984	95.3%	93.4-97.1%	
No	46	4.3%	2.7-5.9%	6	2.4%	0.1-4.7%	40	4.7%	2.9-6.6%	
75 years and older										0.7
Yes	949	94.8%	92.9-96.7%	252	95.3%	92.5-98.2%	697	94.6%	92.3-96.9%	
No	49	5.2%	3.3-7.1%	12	4.7%	1.8-7.5%	37	5.4%	3.1-7.7%	

* Sample by age does not equal the total sample, due to some respondents with missing age   Maryland Cancer Survivor Report, 2009

TABLE 6-6. PEOPLE REPORTING TO HAVE AT LEAST ONE PERSON THEY THINK OF AS THEIR PERSONAL DOCTOR OR HEALTH CARE PROVIDER, BY CANCER SURVIVOR STATUS AND DEMOGRAPHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Sex										
Male										0.013
Yes	2634	81.2%	78.9-83.6%	333	91.7%	85.6-97.7%	2301	80.5%	78.0-82.9%	
No	400	18.8%	16.4-21.1%	17	8.3%	2.3-14.4%	383	19.5%	17.1-22.0%	
Female										0.029
Yes	4688	89.2%	87.8-90.7%	560	93.6%	90.4-96.8%	4128	88.9%	87.3-90.4%	
No	399	10.8%	9.3-12.2%	24	6.4%	3.2-9.6%	375	11.1%	9.6-12.7%	
Race										
White										<0.0001
Yes	5601	87.5%	86.1-88.9%	774	94.3%	92.2-96.5%	4827	86.8%	85.2-88.3%	
No	526	12.5%	11.1-13.9%	33	5.7%	3.5-7.8%	493	13.2%	11.7-14.8%	
African American or Black										0.25
Yes	1152	84.8%	81.8-87.9%	77	91.2%	82.6-99.7%	1075	84.5%	81.4-87.7%	
No	150	15.2%	12.1-18.2%	6	8.8%	0.3-17.4%	144	15.5%	12.3-18.6%	
Other										0.88
Yes	445	78.0%	73.0-83.0%	26	80.1%	53.3-100.0%	419	77.9%	72.8-83.0%	
No	105	22.0%	17.0-27.0%	2	19.9%	0.0-46.7%	103	22.1%	17.0-27.2%	
Education										
Less than high school										0.046
Yes	440	73.8%	66.6-80.9%	67	89.6%	78.7-100.0%	373	72.4%	64.8-80.1%	
No	79	26.2%	19.1-33.4%	4	10.4%	0.0-21.3%	75	27.6%	19.9-35.2%	
High school grad or GED										0.007
Yes	1865	83.9%	81.1-86.6%	229	93.2%	88.5-97.8%	1636	83.2%	80.3-86.1%	
No	231	16.1%	13.4-18.9%	13	6.8%	2.2-11.5%	218	16.8%	13.9-19.7%	
Some college 1-3 years										0.42
Yes	1737	84.9%	81.7-88.1%	220	89.8%	79.5-100.0%	1517	84.5%	81.2-87.9%	
No	174	15.1%	11.9-18.3%	8	10.2%	0.0-20.5%	166	15.5%	12.1-18.8%	
College grad or more										0.001
Yes	3255	88.3%	86.7-89.9%	376	94.9%	92.1-97.7%	2879	87.7%	86.0-89.4%	
No	310	11.7%	10.1-13.3%	15	5.1%	2.3-7.9%	295	12.3%	10.6-14.0%	
Area of Residence										
Urban										0.011
Yes	3801	85.2%	83.5-86.8%	423	92.0%	87.9-96.2%	3378	84.7%	82.9-86.4%	
No	464	14.8%	13.2-16.5%	25	8.0%	3.8-12.1%	439	15.3%	13.6-17.1%	
Rural										0.004
Yes	3456	87.3%	85.4-89.1%	466	94.7%	91.1-98.2%	2990	86.6%	84.6-88.6%	
No	318	12.7%	10.9-14.6%	16	5.3%	1.8-8.9%	302	13.4%	11.4-15.4%	

54

Total number of responses may not equal sample total due to missing data for some characteristics

TABLE 6-7. CANCER SURVIVORS REPORTING TO HAVE AT LEAST ONE PERSON THEY THINK OF AS THEIR PERSONAL DOCTOR OR HEALTH CARE PROVIDER, BY DEMOGRAPHIC CHARACTERISTICS

	N	wt %	95% CI	P-value
Sex				0.56
Male				
Yes	333	91.7%	85.6-97.7%	
No	17	8.3%	2.3-14.4%	
Female				
Yes	560	93.6%	90.4-96.8%	
No	24	6.4%	3.2-9.6%	
Age				0.001
18-49				
Yes	114	83.4%	70.7-96.2%	
No	11	16.6%	3.8-29.3%	
50-64				
Yes	275	93.1%	89.0-97.2%	
No	12	6.9%	2.8-11%	
65-74				
Yes	245	97.6%	95.3-99.9%	
No	6	2.4%	0.1-4.7%	
75 years and older				
Yes	252	95.3%	92.5-98.2%	
No	12	4.7%	1.8-7.5%	
Race				0.097
White				
Yes	774	94.3%	92.2-96.5%	
No	33	5.7%	3.5-7.8%	
Non-white				
Yes	103	87.2%	75.7-98.7%	
No	8	12.8%	1.3-24.3%	
Education				0.52
Less than high school				
Yes	67	89.6%	78.7-100.0%	
No	4	10.4%	0.0-21.3%	
High school grad or GED				
Yes	229	93.2%	88.5-97.8%	
No	13	6.8%	2.2-11.5%	
Some college 1-3 years				
Yes	220	89.8%	79.4-100.0%	
No	8	10.2%	0.0-20.6%	
College grad or more				
Yes	376	94.9%	92.0-97.7%	
No	15	5.1%	2.3-8.0%	
Area of Residence				0.35
Urban				
Yes	423	92.0%	87.9-96.2%	
No	25	8.0%	3.8-12.1%	
Rural				
Yes	466	94.7%	91.1-98.2%	
No	16	5.3%	1.8-8.9%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 6-8. CANCER SURVIVORS REPORTING TO HAVE AT LEAST ONE PERSON THEY THINK OF AS THEIR PERSONAL DOCTOR OR HEALTH CARE PROVIDER, BY YEARS SINCE CANCER DIAGNOSIS

Has a Primary Care Provider	Total			0-5 Years since Diagnosis			6-10 Years since Diagnosis			11 Years or More since Diagnosis			P-value
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	
Yes	866	92.8%	89.4-96.1%	301	94.2%	89.5-98.8%	183	89.7%	78.4-100.0%	382	93.2%	90.0-96.5%	0.62
No	37	7.2%	3.9-10.6%	10	5.8%	1.2-10.5%	7	10.3%	0.0-21.6%	20	6.8%	3.5-10.0%	

Maryland Cancer Survivor Report, 2009

TABLE 6-9. PEOPLE REPORTING TO HAVE VISITED A DOCTOR IN THE PAST YEAR FOR A ROUTINE CHECKUP, BY CANCER SURVIVOR STATUS AND AGE

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Sample										<0.001
Yes	6273	74.5%	73.0-75.9%	796	86.2%	83.3-89.2%	5477	73.5%	71.9-75.1%	
No	1786	25.5%	24.1-27.0%	126	13.8%	10.8-16.7%	1660	26.5%	24.9-28.1%	
18-49 years										0.067
Yes	2106	68.2%	65.8-70.5%	95	78.0%	68.6-87.5%	2011	67.9%	65.5-70.3%	
No	984	31.8%	29.5-34.2%	30	22.0%	12.5-31.4%	954	32.1%	29.7-34.5%	
50-64 years										0.017
Yes	2077	79.5%	77.4-81.6%	239	86.1%	81.3-90.9%	1838	78.8%	76.6-81.1%	
No	536	20.5%	18.4-22.6%	44	13.9%	9.1-18.7%	492	21.2%	18.9-23.4%	
65-74 years										0.35
Yes	1118	88.2%	85.7-90.8%	221	90.3%	86.1-94.6%	897	87.8%	84.8-90.7%	
No	146	11.8%	9.2-14.3%	27	9.7%	5.4-13.9%	119	12.2%	9.3-15.2%	
75 years and older										0.97
Yes	886	89.5%	86.9-92.1%	235	89.6%	84.5-94.6%	651	89.4%	86.4-92.4%	
No	97	10.5%	7.9-13.1%	24	10.4%	5.4-15.5%	73	10.6%	7.6-13.6%	

* Sample by age does not equal the total sample, due to some respondents with missing age   Maryland Cancer Survivor Report, 2009

TABLE 6-10. PEOPLE REPORTING TO HAVE VISITED A DOCTOR IN THE PAST YEAR FOR A ROUTINE CHECKUP, BY CANCER SURVIVOR STATUS AND DEMOGRAPHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Sex										
Male										<0.0001
Yes	2260	71.0%	68.5-73.5%	308	89.2%	85.2-93.2%	1952	69.7%	67.0-72.3%	
No	755	29.0%	26.5-31.5%	38	10.8%	6.8-14.8%	717	30.3%	27.7-33.0%	
Female										0.007
Yes	4013	77.6%	76.0-79.3%	488	83.9%	79.8-88.0%	3525	77.1%	75.3-78.9%	
No	1031	22.4%	20.7-24.0%	88	16.1%	12.0-20.2%	943	22.9%	21.1-24.7%	
Race										
White										<0.0001
Yes	4660	71.5%	69.8-73.2%	680	83.8%	80.3-87.2%	3980	70.3%	68.4-72.1%	
No	1412	28.5%	26.8-30.2%	115	16.2%	12.8-19.7%	1297	29.7%	27.9-31.6%	
African American or Black										0.0001
Yes	1113	83.7%	80.8-86.6%	76	96.1%	92.8-99.5%	1037	83.1%	80.1-86.2%	
No	185	16.3%	13.4-19.2%	7	3.9%	0.5-7.2%	178	16.9%	13.8-19.9%	
Other										0.035
Yes	388	69.5%	64.0-75.0%	25	89.6%	77.1-100.0%	363	68.7%	63.0-74.4%	
No	161	30.5%	25.0-36.0%	3	10.4%	0.0-22.9%	158	31.3%	25.6-37.0%	
Education										
Less than high school										0.0006
Yes	420	78.5%	72.4-84.6%	66	97.3%	93.1-100.0%	354	76.9%	70.4-83.5%	
No	88	21.5%	15.4-27.6%	2	2.7%	0.0-6.9%	86	23.1%	16.5-29.6%	
High school grad or GED										0.0002
Yes	1621	74.6%	71.5-77.7%	209	88.0%	82.6-93.3%	1412	73.6%	70.3-76.9%	
No	459	25.4%	22.3-28.5%	31	12.0%	6.7-17.4%	428	26.4%	23.1-29.7%	
Some college 1-3 years										0.001
Yes	1497	76.9%	73.7-80.0%	192	88.3%	83.0-93.6%	1305	76.0%	72.6-79.3%	
No	396	23.1%	20.0-26.3%	33	11.7%	6.4-17.0%	363	24.0%	20.7-27.4%	
College grad or more										0.0004
Yes	2708	72.3%	70.2-74.4%	327	82.6%	77.6-87.5%	2381	71.4%	69.2-73.7%	
No	841	27.7%	25.6-29.8%	60	17.4%	12.5-22.4%	781	28.6%	26.3-30.8%	
Area of Residence										
Urban										<0.0001
Yes	3301	75.1%	73.2-76.9%	385	86.9%	83.3-90.4%	2916	74.2%	72.2-76.1%	
No	940	24.9%	23.1-26.8%	59	13.1%	9.6-16.7%	881	25.8%	23.9-27.8%	
Rural										<0.0001
Yes	2909	72.1%	69.9-74.3%	408	84.8%	80.2-89.4%	2501	70.9%	68.6-73.2%	
No	830	27.9%	25.7-30.1%	66	15.2%	10.6-19.8%	764	29.1%	26.8-31.4%	

58

TABLE 6-11. CANCER SURVIVORS REPORTING TO HAVE VISITED A DOCTOR IN THE PAST YEAR FOR A ROUTINE CHECKUP, BY DEMOGRAPHIC CHARACTERISTICS

	N	wt %	95% CI	P-value
Sex				0.076
Male				
Yes	308	89.2%	85.2-93.2%	
No	38	10.8%	6.8-14.8%	
Female				
Yes	488	83.9%	79.8-88.0%	
No	88	16.1%	12.0-20.2%	
Age				0.024
18-49				
Yes	95	78.0%	68.6-87.5%	
No	30	22.0%	12.5-31.4%	
50-64				
Yes	239	86.1%	81.3-90.9%	
No	44	13.9%	9.1-18.7%	
65-74				
Yes	221	90.3%	86.1-94.6%	
No	27	9.7%	5.4-13.9%	
75 years and older				
Yes	235	89.6%	84.4-94.7%	
No	24	10.4%	5.3-15.6%	
Race				0.012
White				
Yes	680	83.8%	80.3-87.2%	
No	115	16.2%	12.8-19.7%	
Non-white				
Yes	101	93.8%	88.9-98.8%	
No	10	6.2%	1.2-11.1%	
Education				0.032
Less than high school				
Yes	66	97.3%	93.1-100.0%	
No	2	2.7%	0.0-6.9%	
High school grad or GED				
Yes	209	88.0%	82.7-93.2%	
No	31	12.0%	6.8-17.3%	
Some college 1-3 years				
Yes	192	88.3%	83.0-93.6%	
No	33	11.7%	6.4-17.0%	
College grad or more				
Yes	327	82.6%	77.6-87.6%	
No	60	17.4%	12.4-22.4%	
Area of Residence				0.48
Urban				
Yes	385	86.9%	83.3-90.4%	
No	59	13.1%	9.6-16.7%	
Rural				
Yes	408	84.8%	80.2-89.4%	
No	66	15.2%	10.6-19.8%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 6-12. CANCER SURVIVORS REPORTING TO HAVE VISITED A DOCTOR IN THE PAST YEAR FOR A ROUTINE CHECKUP, BY YEARS SINCE CANCER DIAGNOSIS

Had a physical exam in the past year	Total			0-5 Years since Diagnosis			6-10 Years since Diagnosis			11 Years or More since Diagnosis			P-value
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	
Yes	770	86.1%	83.1-89.0%	266	88.2%	83.4-92.9%	160	83.7%	77.1-90.2%	344	85.7%	81.0-90.3%	0.54
No	122	13.9%	11.0-16.9%	38	11.8%	7.1-16.6%	28	16.3%	9.8-22.9%	56	14.3%	9.7-19.0%	

TABLE 6-13. PEOPLE REPORTING TO HAVE RECEIVED INFLUENZA VACCINE (FLU SHOT OR NASAL SPRAY) WITHIN THE PAST YEAR, BY CANCER SURVIVOR STATUS AND AGE

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Sample										<0.0001
Yes	4074	43.2%	41.6-44.8%	611	61.5%	57.0-66.0%	3463	41.8%	40.1-43.5%	
No	5049	56.8%	55.2-58.4%	325	38.5%	34.0-43.0%	3734	58.2%	56.5-59.9%	
18-49 years										0.32
Yes	1057	33.1%	30.7-35.4%	51	39.3%	26.3-52.3%	1006	32.9%	30.5-35.3%	
No	2057	66.9%	64.6-69.3%	74	60.7%	47.7-73.7%	1983	67.1%	64.7-69.5%	
50-64 years										0.012
Yes	1320	47.7%	45.2-50.2%	161	56.8%	49.5-64.0%	1159	46.8%	44.2-49.5%	
No	1314	52.3%	49.8-54.8%	127	43.2%	36.0-50.5 %	1187	53.2%	50.5-55.8%	
65-74 years										0.18
Yes	865	67.3%	63.8-70.9%	181	72.2%	64.7-79.7%	684	66.2%	62.3-70.2%	
No	411	32.7%	29.1-36.2%	70	27.8%	20.3-35.3%	341	33.8%	29.8-37.7%	
75 years and older										0.66
Yes	775	76.8%	73.2-80.4%	214	75.4%	68.1-82.8%	561	77.3%	73.2-81.5%	
No	225	23.2%	19.6-26.8%	51	24.6%	17.2-31.9%	174	22.7%	18.5-26.8%	

* Sample by age does not equal the total sample, due to some respondents with missing age   Maryland Cancer Survivor Report, 2009

TABLE 6-14. PEOPLE REPORTING TO HAVE RECEIVED INFLUENZA VACCINE (FLU SHOT OR NASAL SPRAY) WITHIN THE PAST YEAR, BY CANCER SURVIVOR STATUS AND DEMOGRPAHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Sex										
Male										<0.0001
Yes	1438	39.1%	36.6-41.7%	241	65.2%	57.6-72.7%	1197	37.2%	34.6-39.9%	
No	1605	60.9%	58.3-63.4%	111	34.8%	27.3-42.4%	1494	62.8%	60.1-65.4%	
Female										<0.0001
Yes	2636	46.9%	45.0-48.9%	370	58.6%	53.2-64.0%	2266	45.9%	43.9-48.0%	
No	2454	53.1%	51.1-55.0%	214	41.4%	36.0-46.8%	2240	54.1%	52.0-56.1%	
Race										
White										<0.0001
Yes	3267	48.1%	46.3-49.8%	548	66.6%	62.4-70.7%	2719	46.2%	44.6-48.0%	
No	2868	51.9%	50.2-53.7%	261	33.4%	29.3-37.6%	2607	53.8%	52.0-55.7%	
African American or Black										0.048
Yes	511	34.4%	31.1-37.8%	40	47.1%	33.8-60.5%	471	33.8%	30.4-37.3%	
No	795	65.6%	62.2-68.9%	43	52.9%	39.5-66.2%	752	66.2%	62.7-69.6%	
Other										0.92
Yes	239	39.5%	33.7-45.3%	13	40.7%	14.1-67.4%	226	39.4%	33.5-45.4%	
No	311	60.5%	54.7-66.3%	15	59.3%	32.6-85.9%	296	60.6%	60.6-54.6%	
Education										
Less than high school										0.0002
Yes	263	40.7%	33.3-48.1%	54	71.5%	57.5-85.4%	209	38.1%	30.3-46.0%	
No	257	59.3%	51.9-66.7%	17	28.5%	14.6-42.5%	240	61.9%	54.0-69.7%	
High school grad or GED										<0.0001
Yes	992	38.0%	34.8-41.2%	143	56.6%	48.0-65.1%	849	36.6%	33.2-39.9%	
No	1108	62.0%	58.8-65.2%	100	43.4%	34.9-52.0%	1008	63.4%	60.1-66.8%	
Some college 1-3 years										<0.0001
Yes	886	39.4%	36.0-42.8%	143	59.4%	50.0-68.8%	743	37.8%	34.3-41.4%	
No	1029	60.6%	57.2-64.0%	86	40.6%	31.2-50.0%	943	62.2%	58.6-65.7%	
College grad or more										<0.0001
Yes	1920	48.6%	46.4-50.9%	271	63.7%	56.7-70.8%	1649	47.4%	45.0-49.8%	
No	1648	51.4%	49.1-53.6%	120	36.3%	29.2-43.3%	1528	52.6%	50.2-55.0%	
Area of Residence										
Urban										<0.0001
Yes	2192	44.0%	42.0-46.0%	293	62.9%	57.1-68.6%	1899	42.6%	40.5-44.7%	
No	2077	56.0%	54.0-58.0%	156	37.1%	31.4-42.9%	1921	57.4%	55.3-59.2%	
Rural										<0.0001
Yes	1848	40.8%	38.6-42.9%	315	57.1%	51.1-63.0%	1533	39.3%	37.0-41.5%	
No	1934	59.2%	57.1-61.4%	168	42.9%	37.0-48.9%	1766	60.7%	58.5-63.0%	

62

Total number of responses may not equal sample
total due to missing data for some characteristics

TABLE 6-15. CANCER SURVIVORS REPORTING TO HAVE RECEIVED INFLUENZA VACCINE (FLU SHOT OR NASAL SPRAY) WITHIN THE PAST YEAR, BY DEMOGRPAHIC CHARACTERISTICS

	N	wt %	95% CI	P-value
Sex				0.17
Male				
Yes	241	65.2%	57.5-72.8%	
No	111	34.8%	27.2-42.5%	
Female				
Yes	370	58.6%	53.2-64.0%	
No	214	41.4%	36.0-46.8%	
Age				<.0001
18-49				
Yes	51	39.3%	26.3-52.3%	
No	74	60.7%	47.7-73.7%	
50-64				
Yes	161	56.8%	49.5-64.0%	
No	127	43.2%	36.0-50.5%	
65-74				
Yes	181	72.2%	64.7-79.7%	
No	70	27.8%	20.3-35.3%	
75 years and older				
Yes	214	75.4%	68.1-82.8%	
No	51	24.6%	17.2-31.9%	
Race				0.001
White				
Yes	548	66.6%	62.4-70.7%	
No	261	33.4%	29.3-37.6%	
Non-white				
Yes	53	44.8%	32.0-57.6%	
No	58	55.2%	42.4-68.0%	
Education				0.35
Less than high school				
Yes	54	71.5%	57.5-85.5%	
No	17	28.5%	14.5-42.5%	
High school grad or GED				
Yes	143	56.6%	48.0-65.1%	
No	100	43.4%	34.9-52.0%	
Some college 1-3 years				
Yes	143	59.4%	50.0-68.8%	
No	86	40.6%	31.2-50.0%	
College grad or more				
Yes	271	63.7%	56.7-70.8%	
No	120	36.3%	29.2-43.3%	
Area of Residence				0.17
Urban				
Yes	293	62.9%	57.1-68.6%	
No	156	37.1%	31.4-42.9%	
Rural				
Yes	315	57.1%	51.1-63.1%	
No	168	42.9%	36.9-49.0%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 6-16. CANCER SURVIVORS REPORTING TO HAVE RECEIVED INFLUENZA VACCINE (FLU SHOT OR NASAL SPRAY) WITHIN THE PAST 12 MONTHS, BY YEARS SINCE CANCER DIAGNOSIS

Influenza Vaccine in Past 12 Months	Total			0-5 Years since Diagnosis			6-10 Years since Diagnosis			11 Years or More since Diagnosis			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Yes	592	62.4%	58.1-66.7%	197	57.5%	50.2-64.7%	132	70.0%	61.4-78.6%	263	62.4%	55.9-68.9%	0.1
No	313	37.6%	33.3-41.9%	114	42.5%	35.3-49.8%	58	30.0%	21.4-38.6%	141	37.6%	31.1-44.1%	

Maryland Cancer Survivor Report, 2009

Section 7
Lifestyle Behaviors

Cancer survivors are at increased risk for cancer recurrence and for developing a second cancer, and may also be at increased risk for other chronic diseases as a result of their cancer treatment.[1] Lifestyle behaviors such as smoking, excessive alcohol consumption, an unhealthy diet, and lack of physical activity can have adverse impacts on survival and quality of life for cancer survivors. This section describes the prevalence of these lifestyle factors among cancer survivors in Maryland.

Tobacco Use

Tobacco use remains the leading preventable cause of morbidity and mortality in the U.S., having been implicated causally in a variety of diseases.[2,3] Cigarette smokers are estimated to die 10 years earlier than those who do not smoke, and approximately half of smokers will die of a smoking related cause.[3] According to the 2004 Surgeon General's report on the health consequences of smoking, there is sufficient evidence to infer a causal relationship between smoking and several different types of cancer, including lung, laryngeal, bladder, esophageal, pancreatic, stomach, kidney, oral/pharyngeal, cervical, and acute myeloid leukemia.[2] There is evidence to suggest liver and colorectal cancer may also be associated with smoking. There is some evidence that occasional smokers, defined as those who have never smoked daily, may have an increased risk of developing smoking-related cancers.[4]

For cancer survivors, health risks associated with continued smoking are amplified for several reasons. [5]
- Smoking can increase the risk of recurrence of the original malignancy.
- Smoking can increase their risk of a second primary neoplasm.
- Survivors who have been treated for Hodgkin's lymphoma with alkylating agents and radiation therapy, have an increased risk of lung cancer; tobacco use increases their risk of lung cancer by more than 20-fold.[6]
- Cancer survivors who have been treated with certain types of chemotherapy (e.g., bleomycin or carmustine) or with chest radiotherapy are at increased risk of respiratory problems. Smoking increases the risk of serious respiratory disease and/or restrictive lung disease among cancer patients.
- Cancer patients treated with anthracyclines are more likely to develop congestive heart failure if they are long-term smokers.

The following points summarize information on smoking prevalence among cancer survivors in Maryland:
- A significantly higher proportion of cancer survivors (48.8%) reported they were either current or former cigarette smokers compared to people without a history of cancer (37.5%) (data not shown in tables).
- The prevalence of current smoking among cancer survivors in Maryland is 12.0% compared to 15.0% among persons without a history of cancer (Table 7-1).
- Cancer survivors differed significantly in their smoking status from persons without a history of cancer on most demographic characteristics examined.

o It was generally seen that a higher proportion of persons without cancer reported they had never smoked cigarettes and a higher proportion of cancer survivors were former smokers (Table 7-2).
- Among cancer survivors, the proportion who were current smokers or former smokers did not differ significantly when stratified by years elapsed since cancer diagnosis (Table 7-4).

Cancer survivors represent a particularly important target for smoking cessation programs because of their vulnerability to the health effects of continued smoking. Following the diagnosis of cancer, survivors have increased interest in cessation, providing many 'teachable moments.'[7] Success of smoking cessation interventions has been varied, however, strong and frequent messages from health care providers, combined with counseling and nicotine replacement therapy, may have an impact on cessation rates among cancer survivors.[8,9]

Current Alcohol Consumption

Alcohol consumption is a modifiable lifestyle risk factor that has been shown to influence the incidence of several diseases, including cancer.[10] There is solid evidence that alcohol consumption is associated with an increased risk of oral, esophageal, and breast cancer in a dose-dependent fashion. There is evidence that alcohol is probably associated with liver cancer and colorectal cancer in women.[11]

According to current guidelines of the National Institute on Alcohol Abuse and Alcoholism (NIAAA), men are considered to be at high risk for alcohol-related problems if they consume more than 14 drinks per week or engage in binge drinking, while women are considered to be at high risk if they consume more than seven drinks per week or engage in binge drinking.[12] (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.) 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.[13] Despite the risks of alcohol use among cancer survivors, the issue of guidelines for alcohol use in this population has not been addressed.

- In Maryland, cancer survivors were more likely to be non-drinkers than persons without a history of cancer (50.6% vs. 43.5%, respectively; Table 7-5).
- The prevalence of high-risk drinking among cancer survivors was significantly lower than among persons without a cancer history (8.8% vs. 14.2%; Table 7-5).
  o Among cancer survivors, high-risk drinking was most prevalent among younger persons (age 18-49 years, 18.1%). This proportion was comparable to the prevalence among persons without a cancer history (18.3%).
- Table 7-6 compares alcohol consumption between cancer survivors and persons without a history of cancer by several demographic characteristics.
  o The prevalence of high-risk alcohol use was significantly lower among cancer survivors (compared to persons without a cancer history) who were male, white, had less than a high school education or some college education, and those living in urban areas.

- Among cancer survivors, drinking status did not differ significantly by years since cancer diagnosis (Table 7-8).

Physical Activity

In addition to known benefits in reducing cardiovascular disease risk, physical activity may also reduce the risk of developing several types of cancer, including cancer of the breast,[14] colon,[15] and endometrium.[16] Increasing physical activity among all Americans continues to be an important objective of Healthy People (HP) 2020.[17] When the BRFSS survey was conducted in 2009, two of the HP 2010 goals were to increase the proportion of adults 18 years and older who engage in (1) moderate physical activity for at least 30 minutes per day, 5 or more days per week, or (2) vigorous physical activity for at least 20 minutes per day, 3 or more days per week, to a target of 50%.[18] Evidence suggests that physical activity improves self-reported quality of life measures among cancer survivors.[19,20]

The following summarizes findings related to physical activity among cancer survivors in Maryland.
- A lower proportion of cancer survivors met either goal for physical activity listed above when compared to those without cancer (42.2% vs. 49.1%; Table 7-9).
- When comparing cancer survivors to persons without cancer by demographic characteristics, this finding of lower physical activity held true for men, whites, persons with less than a high school education and persons who graduated from high school, and urban residents (Table 7-10).
- Among cancer survivors only, physical activity increased with increasing level of educational attainment. A higher proportion of whites than non-whites met either goal for physical activity (45.7% vs. 32.6%); this measure was marginally significant (Table 7-11).
- Among cancer survivors, the proportion meeting physical activity goals did not differ significantly by years since cancer diagnosis (Table 7-12).

Fruit and Vegetable Intake

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.[21,22] 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.[23]

The following is a summary of findings related to fruit and vegetable intake among cancer survivors in Maryland.

- Cancer survivors were no more likely to eat five or more servings of fruits and vegetables than persons without a history of cancer. Only 27.5% of survivors and 27.8% of respondents without cancer met the goal of eating five servings a day (Table 7-13).

- Levels of fruit and vegetable consumption did not differ significantly between cancer survivors and persons without cancer by any of the demographic characteristics examined (Table 7-14).
- Among cancer survivors, women were significantly more likely than men to report eating five servings of fruits and vegetables a day (34% vs. 19.4%, respectively). The proportion of cancer survivors who reported eating five or more servings of fruits and vegetables a day increased as education level increased (Table 7-15).
- Among cancer survivors, fruit and vegetable consumption did not differ by years since cancer diagnosis (Table 7-16).

Summary

While smoking poses significant health risks for everyone, people who continue to smoke after a cancer diagnosis are at higher risk for smoking-related illnesses. The prevalence of current smoking among cancer survivors in Maryland is 12% compared to 15% among persons without a history of cancer.

The prevalence of high-risk drinking was found to be significantly lower among cancer survivors than in persons without a history of cancer (8.8% vs. 14.2%, respectively). Cancer survivors were also more likely to be non-drinkers than persons without a cancer history (50.6% vs. 43.5%, respectively).

Cancer survivors were less likely than persons without cancer to meet Healthy People 2010 targets for regular moderate or vigorous physical activity (42.2% vs. 49.1%). White cancer survivors were marginally more likely than non-whites to meet either target for regular moderate or physical activity. The proportion of cancer survivors meeting either target for regular moderate or physical activity increased with increasing education level.

The 2009 BRFSS found that fruit and vegetable consumption was low among both cancer survivors and persons without cancer. Overall, only 27.5% of survivors and 27.8% of respondents without cancer met the CDC's recommendation for eating five or more servings a day (proportions were not statistically significantly different.)

---

[1] Hewitt M, Greenfield S, Stovall E, eds. From cancer patient to cancer survivor: lost in transition. Washington, DC: The National Academies Press, 2006.

[2] The health consequences of smoking: a report of the Surgeon General. [Atlanta, Ga.]: Dept. of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; Washington, D.C.: For sale by the Supt. of Docs., U.S. G.P.O., 2004. Available at http://www.cdc.gov/tobacco/data_statistics/sgr/2004. Accessed March 7, 2011.

[3] Doll R, Peto R, Boreham J, Sutherland I. Mortality in relation to smoking: 50 years' observations on male British doctors. BMJ 2004;328(7455):1519.

[4] Bjerregaard BK, Raaschou-Nielsen O, Sørensen M, et al. The effect of occasional smoking on smoking-related cancers: in the European Prospective Investigation into Cancer and Nutrition (EPIC). Cancer Causes Control 2006;17(10):1305-9.

[5] Klosky JL, Tyc VL, Garces-Webb DM, et al. Emerging issues in smoking among adolescent and adult cancer survivors. Cancer 2007;110:2408–19.

[6] Travis LB, Gospodarowicz M, Curtis RE, et al. Lung cancer following chemotherapy and radiotherapy for Hodgkin's disease. J Natl Cancer Inst 2002 Feb 6;94(3):182-92.

[7] Gritz ER, Fingeret MC, Vidrine DJ, et al. Success and failures of the teachable moment: smoking cessation in cancer patients. Cancer 2006;106:17-27.

[8] de Moor JS, Elder K, Emmons KM. Smoking prevention and cessation interventions for cancer survivors. Semin Oncol Nurs 2008;24(3):180-92.

[9] Cox LS, Africano NL, Tercyak KP, Taylor KL. Nicotine dependence treatment for patients with cancer. Cancer 2003;98(3):632-44.

[10] Centers for Disease Control and Prevention. Quick Stats: General Information on Alcohol Use and Health. Centers for Disease Control and Prevention. Available at http://www.cdc.gov/alcohol/quickstats/general_info.htm. Accessed March 7, 2011.

[11] World Cancer Research Fund / American Institute for Cancer Research. Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective. Washington DC: AICR, 2007. Available at http://www.dietandcancerreport.org/downloads/Second_Expert_Report.pdf. Accessed March 7, 2011.

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

[13] 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. Accessed March 7, 2011.

[14] Monninkhof EM, Elias SJ, Vlems FA, et al. Physical activity and breast cancer: a systematic review. Epidemiology 2007;18(1):137-57.

[15] Wolin KY, Yan Y, Colditz GA, Lee I-M. Physical activity and colon cancer prevention: a meta-analysis. Br J Cancer 2009;100(4):611-6.

[16] Voskuil DW, Monninkhof EM, Elias SJ, et al. Physical activity and endometrial cancer risk, a systematic review of current evidence. Cancer Epidemiol Biomarkers Prev 2007;16(4):639-48.

[17] U.S. Department of Health and Human Services. Healthy People 2020, Physical Activity. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=33. Accessed April 7, 2011.

[18] U.S. Department of Health and Human Services. Healthy People 2010, Physical Activity and Fitness. Available at http://healthypeople.gov/2010/data/midcourse/html/focusareas/FA22Objectives.htm. Accessed April 7, 2011.

[19] Mosher CE, Sloane R, Morey MC, et al. Associations between lifestyle factors and quality of life among older, long-term breast, prostate, and colorectal cancer survivors. Cancer 2009;115(17):4001-4009.

[20] Coups EJ, Park BJ, Feinstein MB, et al. Physical activity among lung cancer survivors: Changes across the cancer trajectory and associations with quality of life. Cancer Epidemiol Biomarkers Prev 2009;18(2):664-72.

[21] Eyre H, Kahn R, and Robertson RM. Preventing cancer, cardiovascular disease, and diabetes. Diabetes Care 2004; 27(7):1812-1824.

[22] National Cancer Institute. PDQ Cancer Information Summaries: Prevention. Available at http://www.cancer.gov/cancertopics/pdq/prevention. Accessed March 7, 2011.

[23] Kushi LH, Byers T, Doyle C, 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.

TABLE 7-1. CIGARETTE SMOKING STATUS OF RESPONDENTS, BY CANCER SURVIVOR STATUS AND AGE

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Sample*										<0.0001
Never	4522	61.7%	60.1-63.3%	439	51.3%	46.8-55.7%	4083	62.5%	60.9-64.2%	
Former	2444	23.5%	22.3-24.8%	388	36.8%	32.7-40.9%	2056	22.5%	21.2-23.8%	
Current	1136	14.8%	13.5-16.0%	107	12.0%	9.0-14.9%	1029	15.0%	13.7-16.3%	
18-49 years										0.86
Never	2022	69.1%	66.8-71.4%	80	71.9%	61.5-82.2%	1942	69.1%	66.7-71.4%	
Former	554	14.4%	12.8-16.0%	23	12.9%	6.5-19.3%	531	14.4%	12.8-16.1%	
Current	530	16.5%	14.6-18.4%	22	15.2%	6.9-23.6%	508	16.5%	14.6-18.4%	
50-64 years										0.032
Never	1357	52.4%	49.9-55.0%	130	43.0%	35.7-50.3%	1227	53.3%	50.7-56.0%	
Former	846	31.8%	29.5-34.2%	105	39.2%	32.0-46.4%	741	31.1%	28.7-33.6%	
Current	422	15.7%	13.9-17.6%	52	17.8%	12.2-23.4%	370	15.5%	13.6-17.5%	
65-74 years										0.64
Never	565	45.6%	41.9-49.2%	108	47.5%	39.3-55.6%	457	45.1%	41.0-49.2%	
Former	578	43.8%	40.2-47.4%	120	40.2%	32.6-47.8%	458	44.6%	40.5-48.7%	
Current	130	10.7%	8.2-13.0%	23	12.3%	5.3-19.2%	107	10.3%	7.8-12.7%	
75 years and older										0.02
Never	499	53.2%	49.1-57.3%	117	47.8%	39.8-55.8%	382	55.1%	50.4-59.9%	
Former	445	42.8%	38.8-46.8%	138	50.2%	42.2-58.2%	307	40.1%	35.5-44.7%	
Current	46	4.0%	2.4-5.7%	9	2.0%	0.5-3.4%	37	4.8%	2.6-6.9%	

* Sample by age does not equal the total sample, due to some respondents with missing age   Maryland Cancer Survivor Report, 2009

TABLE 7-2. CIGARETTE SMOKING STATUS OF RESPONDENTS, BY CANCER SURVIVOR STATUS AND DEMOGRPAHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Sex										
Male										<0.0001
Never	1501	58.4%	55.8-61.0%	130	46.0%	38.1-53.8%	1371	59.3%	56.6-62.0%	
Former	1082	25.5%	23.5-27.5%	188	44.3%	37.0-51.5%	894	24.1%	22.0-26.2%	
Current	448	16.1%	14.0-18.2%	33	9.8%	5.6-13.9%	415	16.6%	14.4-18.7%	
Female										0.0003
Never	3021	64.7%	62.8-66.5%	309	55.5%	50.1-60.8%	2712	65.5%	63.5-67.4%	
Former	1362	21.8%	20.2-23.3%	200	30.8%	26.1-35.6%	1162	21.0%	19.4-22.6%	
Current	688	13.5%	12.1-14.9%	74	13.7%	9.6-17.8%	614	13.5%	12.1-15.0%	
Race										
White										<0.0001
Never	3277	57.4%	55.7-59.2%	373	49.9%	45.5-54.3%	2904	58.2%	56.3-60.1%	
Former	1993	27.5%	26.0-28.9%	345	39.1%	34.9-43.2%	1648	26.3%	24.8-27.9%	
Current	845	15.1%	13.7-16.4%	90	11.0%	8.1-13.9%	755	15.5%	14.0-17.0%	
African American or Black										0.01
Never	810	65.0%	61.5-68.5%	42	46.1%	32.7-59.5%	768	65.8%	62.3-69.4%	
Former	287	19.1%	16.4-21.8%	27	33.7%	21.5-45.9%	260	18.4%	15.7-21.2%	
Current	203	15.9%	13.1-18.7%	14	20.2%	8.6-31.7%	189	15.7%	12.9-18.6%	
Other										0.58
Never	357	73.2%	68.1-78.3%	16	71.7%	52.0-91.0%	341	73.3%	68.0-78.5%	
Former	122	15.2%	11.4-19.0%	10	21.5%	4.7-38.3%	112	14.9%	11.0-18.8%	
Current	68	11.6%	7.7-15.6%	2	6.8%	0.0-16.6%	66	11.8%	7.7-15.9%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer
Survivor Report, 2009

TABLE 7-2. CIGARETTE SMOKING STATUS OF RESPONDENTS, BY CANCER SURVIVOR STATUS AND DEMOGRPAHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Education										
Less than high school										<0.0001
Never	216	51.5%	44.1-58.9%	18	23.8%	11.7-35.8%	198	53.8%	46.0-61.7%	
Former	154	17.2%	13.1-21.3%	38	47.9%	32.9-63.0%	116	14.7%	10.6-18.7%	
Current	147	31.2%	24.5-38.0%	15	28.3%	13.7-42.9%	132	31.5%	24.3-38.7%	
High school grad or GED										0.0004
Never	1056	54.8%	51.4-58.3%	107	41.2%	33.0-49.3%	949	55.8%	52.2-59.5%	
Former	636	23.4%	21.0-25.9%	95	38.4%	30.3-46.5%	541	22.3%	19.7-24.8%	
Current	405	21.8%	18.9-24.7%	41	20.4%	12.3-28.5%	364	21.9%	18.8-24.9%	
Some college 1-3 years										0.004
Never	935	55.3%	51.8-58.8%	97	51.1%	41.3-60.8%	838	55.6%	51.9-59.3%	
Former	633	25.5%	22.6-28.3%	104	37.7%	29.0-46.4%	529	24.5%	21.5-27.5%	
Current	337	19.3%	16.4-22.2%	27	11.2%	5.6-16.9%	310	19.9%	16.8-23.0%	
College grad or more										0.0003
Never	2301	70.8%	68.8-72.7%	216	60.4%	54.1-66.7%	2085	71.6%	69.6-73.6%	
Former	1009	23.3%	21.6-25.1%	151	33.9%	27.9-39.9%	858	22.4%	20.6-24.3%	
Current	244	5.9%	4.9-6.9%	24	5.7%	2.9-8.5%	220	5.9%	4.9-7.0%	
Area of Residence										
Urban										<0.0001
Never	2502	63.4%	61.5-65.3%	227	52.8%	47.2-58.5%	2275	64.2%	62.2-66.2%	
Former	1209	22.7%	21.2-24.2%	175	36.0%	30.8-41.2%	1034	21.7%	20.1-23.3%	
Current	541	13.9%	12.4-15.3%	47	11.2%	7.5-14.8%	494	14.1%	12.5-15.6%	
Rural										<.0001
Never	1963	54.8%	52.6-57.1%	210	47.3%	41.5-53.2%	1753	55.5%	53.2-57.9%	
Former	1216	26.7%	24.9-28.6%	212	39.3%	33.9-44.7%	1004	25.6%	23.7-27.5%	
Current	589	18.4%	16.5-20.3%	59	13.3%	9.0-17.7%	530	18.9%	16.8-20.9%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer
Survivor Report, 2009

TABLE 7-3. CIGARETTE SMOKING STATUS OF CANCER SURVIVORS, BY DEMOGRPAHIC CHARACTERISTICS

	N	wt %	95% CI	P-value
Sex				0.012
Male				
Never	130	46.0%	38.1-53.8%	
Former	188	44.3%	37.0-51.6%	
Current	33	9.8%	5.6-13.9%	
Female				
Never	309	55.5%	50.1-60.8%	
Former	200	30.8%	26.1-35.6%	
Current	74	13.7%	9.6-17.8%	
Age				<.0001
18-49				
Never	80	71.9%	61.5-82.3%	
Former	23	12.9%	6.5-19.3%	
Current	22	15.2%	6.8-23.6%	
50-64				
Never	130	43.0%	35.7-50.3%	
Former	105	39.2%	32.0-46.4%	
Current	52	17.8%	12.2-23.4%	
65-74				
Never	108	47.5%	39.3-55.6%	
Former	120	40.2%	32.6-47.8%	
Current	23	12.3%	5.3-19.3%	
75 years and older				
Never	117	47.8%	39.8-55.9%	
Former	138	50.2%	42.2-58.2%	
Current	9	2.0%	0.5-3.4%	
Race				0.24
White				
Never	373	49.9%	45.5-54.3%	
Former	345	39.1%	34.9-43.3%	
Current	90	11.0%	8.1-13.9%	
Non-white				
Never	58	55.3%	42.8-67.8%	
Former	37	29.3%	19.0-39.7%	
Current	16	15.4%	6.7-24.0%	
Education				<.0001
Less than high school				
Never	18	23.8%	11.7-35.8%	
Former	38	47.9%	32.9-63.0%	
Current	15	28.3%	13.7-42.9%	
High school grad or GED				
Never	107	41.2%	33.0-49.4%	
Former	95	38.4%	30.3-46.5%	
Current	41	20.4%	12.3-28.6%	
Some college 1-3 years				
Never	97	51.1%	41.3-60.8%	
Former	104	37.7%	29.0-46.4%	
Current	27	11.2%	5.6-16.9%	
College grad or more				
Never	216	60.4%	54.1-66.7%	
Former	151	33.9%	27.9-39.9%	
Current	24	5.7%	2.9-8.5%	
Area of Residence				0.41
Urban				
Never	227	52.8%	47.1-58.5%	
Former	175	36.0%	30.8-41.2%	
Current	47	11.2%	7.5-14.8%	
Rural				
Never	210	47.3%	41.5-53.2%	
Former	212	39.3%	33.9-44.7%	
Current	59	13.3%	9.0-17.7%	

Total number of responses may not equal sample
total due to missing data for some characteristics

73

TABLE 7-4. CIGARETTE SMOKING STATUS OF CANCER SURVIVORS, BY YEARS SINCE CANCER DIAGNOSIS

Smoking Status	Total			0-5 Years since Diagnosis			6-10 Years since Diagnosis			11 Years or More since Diagnosis			P-value
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	
Never	423	50.6%	46.2-55.1%	140	47.3%	40.0-54.5%	97	54.5%	44.5-64.5%	186	51.4%	44.8-58.0%	0.79
Former	377	37.4%	33.3-41.5%	130	39.0%	32.2-45.9%	75	33.6%	26.5-44.6%	172	37.0%	30.9-43.2%	
Current	103	12.0%	8.9-15.0%	40	13.7%	8.4-19.0%	18	10.0%	3.9-16.0%	45	11.6%	6.9-16.2%	

TABLE 7-5. ALCOHOL CONSUMPTION BY RESPONDENTS DURING THE PAST 30 DAYS, BY CANCER SURVIVOR STATUS AND AGE

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Sample*										0.0006
None	3656	44.0%	42.3-45.6%	458	50.6%	46.1-55.1%	3198	43.5%	41.7-45.2%	
Low risk	3472	42.2%	40.6-43.8%	393	40.6%	36.3-44.9%	3079	42.3%	40.6-44.0%	
High risk	944	13.8%	12.6-15.1%	84	8.8%	6.4-11.2%	860	14.2%	12.9-15.6%	
18-49 years										0.27
None	1207	41.1%	38.5-43.6%	52	50.1%	36.8-63.5%	1155	40.8%	38.2-43.4%	
Low risk	1355	40.7%	38.2-43.1%	50	31.7%	20.9-42.6%	1305	40.9%	38.4-43.4%	
High risk	528	18.3%	16.3-20.3%	23	18.1%	9.1-27.1%	505	18.3%	16.2-20.3%	
50-64 years										0.012
None	1124	41.9%	39.4-44.4%	134	50.9%	43.6-58.2%	986	41.0%	38.3-43.6%	
Low risk	1203	47.9%	45.4-50.5%	124	42.9%	35.6-50.1%	1079	48.4%	45.8-51.1%	
High risk	292	10.2%	8.7-11.7%	26	6.3%	3.3-9.2%	266	10.6%	9.0-12.2%	
65-74 years										0.012
None	677	54.6%	51.0-58.3%	120	44.5%	36.5-52.6%	557	56.9%	52.9-61.0%	
Low risk	507	40.1%	36.5-43.6%	109	47.1%	39.0-55.3%	398	38.5%	34.5-42.5%	
High risk	81	5.3%	3.8-6.7%	21	8.3%	3.8-12.8%	60	4.6%	3.2-6.1%	
75 years and older										0.48
None	590	59.2%	55.1-63.2%	144	55.9%	48.1-63.8%	446	60.3%	55.7-65.0%	
Low risk	366	37.0%	33.1-41.0%	107	39.1%	31.4-46.9%	259	36.3%	31.7-40.9%	
High risk	39	3.8%	2.4-5.2%	14	4.9%	1.9-8.0%	25	3.4%	1.8-4.9%	

Sample by age does not equal the total sample, due to some respondents with missing age   Maryland Cancer Survivor Report, 2009

TABLE 7-6. ALCOHOL CONSUMPTION BY RESPONDENTS DURING THE PAST 30 DAYS, BY CANCER SURVIVOR STATUS AND DEMOGRPAHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Sex										
Male										0.003
None	1140	38.9%	36.2-41.6%	139	45.2%	37.4-53.0%	1001	38.4%	35.6-41.3%	
Low risk	1419	44.3%	41.7-47.0%	177	46.9%	39.5-54.4%	1242	44.2%	41.4-46.9%	
High risk	455	16.8%	14.7-18.8%	35	7.8%	4.4-11.2%	420	17.4%	15.2-19.6%	
Female										0.077
None	2516	48.6%	46.6-50.6%	319	54.9%	49.5-60.2%	2197	48.0%	45.9-50.1%	
Low risk	2053	40.2%	38.3-42.1%	216	35.6%	30.5-40.6%	1837	40.6%	38.6-42.7%	
High risk	489	11.2%	9.9-12.6%	49	9.6%	6.2-13.0%	440	11.4%	9.9-12.8%	
Race										
White										<0.0001
None	2500	36.3%	34.6-38.0%	379	46.2%	41.8-50.6%	2121	35.2%	33.4-37.1%	
Low risk	2823	47.1%	45.4-48.9%	353	44.1%	39.8-48.5%	2470	47.4%	45.5-49.4%	
High risk	774	16.6%	15.1-18.1%	76	9.6%	7.0-12.2%	698	17.3%	15.7-19.0%	
African American or Black										0.77
None	792	56.1%	52.4-59.8%	54	57.7%	44.2-71.2%	738	56.0%	52.2-59.9%	
Low risk	397	34.6%	31.0-38.1%	24	36.1%	23.0-49.2%	373	34.5%	30.8-38.2%	
High risk	107	9.3%	7.1-11.6%	5	6.2%	0.0-14.0%	102	9.5%	7.1-11.8%	
Other										0.04
None	295	53.6%	47.6-59.5%	20	78.5%	61.5-95.6%	275	52.4%	46.3-58.6%	
Low risk	197	35.6%	30.0-41.1%	6	14.8%	1.0-28.6%	191	36.5%	30.8-42.2%	
High risk	53	10.9%	6.7-15.1%	2	6.6%	0.0-16.4%	51	11.1%	6.7-15.4%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 7-6. ALCOHOL CONSUMPTION BY RESPONDENTS DURING THE PAST 30 DAYS, BY CANCER SURVIVOR STATUS AND DEMOGRPAHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Education										
Less than high school										0.092
None	404	70.2%	63.1-77.3%	61	80.6%	67.6-93.6%	343	69.3%	61.1-77.0%	
Low risk	73	17.6%	11.6-23.6%	8	17.5%	4.6-30.4%	65	17.7%	11.2-24.1%	
High risk	39	12.2%	7.0-17.4%	2	1.9%	0-4.6%	37	13.0%	7.4-18.6%	
High school grad or GED										0.68
None	1234	56.0%	52.5-59.5%	152	59.6%	51.1-68.1%	1082	55.7%	52.1-59.4%	
Low risk	601	28.5%	25.4-31.6%	68	27.6%	20.3-35.0%	533	28.6%	25.3-31.9%	
High risk	250	15.5%	13.0-17.9%	22	12.8%	5.7-19.8%	228	15.7%	13.1-18.2%	
Some college 1-3 years										0.0004
None	867	44.9%	41.4-48.5%	115	60.5%	51.7-69.4%	752	43.7%	40.0-47.4%	
Low risk	801	38.4%	35.0-41.7%	93	31.6%	23.6-39.6%	708	38.9%	35.3-42.4%	
High risk	229	16.7%	13.5-19.9%	21	7.9%	3.7-12.0%	208	17.4%	14.0-20.8%	
College grad or more										0.23
None	1132	32.7%	30.6-34.9%	128	36.0%	29.1-43.0%	1004	32.5%	30.2-34.7%	
Low risk	1989	55.6%	53.3-57.8%	224	55.6%	48.7-62.5%	1765	55.6%	53.2-57.9%	
High risk	424	11.7%	10.3-13.1%	39	8.4%	5.2-11.6%	385	12.0%	10.4-13.5%	
Area of Residence										
Urban										0.007
None	1795	43.7%	41.6-45.7%	212	50.1%	44.4-55.8%	1583	43.2%	41.0-45.3%	
Low risk	1948	42.9%	40.9-44.9%	203	41.9%	36.4-47.4%	1745	43.0%	40.9-45.1%	
High risk	492	13.4%	11.9-14.9%	34	8.0%	5.0-11.0%	458	13.8%	12.2-15.4%	
Rural										0.034
None	1815	44.4%	42.2-46.7%	244	51.6%	45.9-57.4%	1571	43.8%	41.4-46.1%	
Low risk	1499	40.3%	38.1-42.5%	188	37.0%	31.6-42.4%	1311	40.6%	38.2-42.9%	
High risk	447	15.3%	13.5-17.1%	50	11.4%	7.4-15.4%	397	15.7%	13.7-17.6%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 7-7. ALCOHOL CONSUMPTION BY CANCER SURVIVORS DURING THE PAST 30 DAYS, BY DEMOGRPAHIC CHARACTERISTICS

	N	wt %	95% CI	P-value
Sex				0.041
Male				
None	139	45.2%	37.5-53.0%	
Low risk	177	46.9%	39.6-54.3%	
High risk	35	7.8%	4.4-11.2%	
Female				
None	319	54.9%	49.5-60.2%	
Low risk	216	35.6%	30.5-40.6%	
High risk	49	9.6%	6.2-13.0%	
Age				0.003
18-49				
None	52	50.1%	36.8-63.5%	
Low risk	50	31.7%	20.9-42.6%	
High risk	23	18.1%	9.1-27.1%	
50-64				
None	138	50.9%	43.5-58.2%	
Low risk	124	42.9%	35.6-50.1%	
High risk	26	6.3%	3.3-9.2%	
65-74				
None	120	44.5%	36.5-52.6%	
Low risk	109	47.1%	39.0-55.3%	
High risk	21	8.3%	3.8-12.8%	
75 years and older				
None	144	55.9%	48.1-63.8%	
Low risk	107	39.1%	31.4-46.9%	
High risk	14	4.9%	1.9-8.0%	
Race				0.017
White				
None	379	46.2%	41.8-50.6%	
Low risk	353	44.1%	39.8-48.5%	
High risk	76	9.6%	7.0-12.3%	
Non-white				
None	74	65.2%	53.5-76.9%	
Low risk	30	28.5%	17.7-39.2%	
High risk	7	6.4%	0.3-12.4%	
Education				<.0001
Less than high school				
None	61	80.6%	67.6-93.6%	
Low risk	8	17.5%	4.6-30.4%	
High risk	2	1.9%	0-4.6%	
High school grad or GED				
None	152	59.6%	51.0-68.1%	
Low risk	68	27.6%	20.3-35.0%	
High risk	22	12.8%	5.7-19.9%	
Some college 1-3 years				
None	115	60.5%	51.7-69.4%	
Low risk	93	31.6%	23.6-39.6%	
High risk	21	7.9%	3.7-12.1%	
College grad or more				
None	128	36.0%	29.1-43.0%	
Low risk	224	55.6%	48.7-62.5%	
High risk	39	8.4%	5.2-11.6%	
Area of Residence				0.26
Urban				
None	212	50.1%	44.4-55.8%	
Low risk	203	41.9%	36.4-47.4%	
High risk	34	8.0%	5.0-11.0%	
Rural				
None	244	51.6%	45.9-57.4%	
Low risk	188	37.0%	31.7-42.3%	
High risk	50	11.4%	7.4-15.4%	

Total number of responses may not equal sample
total due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 7-8. ALCOHOL CONSUMPTION BY CANCER SURVIVORS DURING THE PAST 30 DAYS, BY YEARS SINCE CANCER DIAGNOSIS

Drinking Status	Total			0-5 Years since Diagnosis			6-10 Years since Diagnosis			11 Years or More since Diagnosis			P-value
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	
None	435	49.1%	44.7-53.5%	146	48.7%	41.4-55.9%	93	50.6%	40.4-60.8%	196	48.7%	42.1-55.3%	0.56
Low risk	386	41.7%	37.5-46.0%	129	39.7%	32.8-46.6%	78	39.8%	30.3-49.2%	179	44.4%	37.8-50.9%	
High risk	83	9.1%	6.6-11.7%	36	11.6%	7.0-16.3%	18	9.6%	4.3-14.9%	29	6.9%	3.4-10.5%	

Maryland Cancer Survivor Report, 2009

TABLE 7-9. ADULTS THAT MEET THE HEALTHY PEOPLE 2010 GOALS FOR EITHER WEEKLY MODERATE OR VIGOROUS PHYSICAL ACTIVITY* BY CANCER SURVIVOR STATUS AND AGE

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Sample										0.006
Yes	3608	48.6%	46.9-50.3%	384	42.4%	37.9-46.8%	3224	49.1%	47.3-50.9%	
No	4198	51.4%	49.7-53.1%	516	57.6%	53.2-62.1%	3682	50.9%	49.1-52.7%	
18-49 years										0.15
Yes	1531	52.6%	50.0-55.1%	58	43.3%	30.6-56.0%	1473	52.8%	50.2-55.4%	
No	1510	47.4%	44.9-50.0%	67	56.7%	44.0-69.4%	1443	47.2%	44.6-49.8%	
50-64 years										0.33
Yes	1173	45.5%	43.0-48.1%	119	41.9%	34.6-49.3%	1054	45.9%	43.2-48.6%	
No	1387	54.5%	51.9-57.0%	165	58.1%	50.7-65.4%	1213	54.1%	51.4-56.8%	
65-74 years										0.1
Yes	545	43.5%	39.8-47.2%	118	49.8%	41.4-58.2%	427	42.1%	38.0-46.2%	
No	658	56.5%	52.8-60.2%	119	50.2%	41.8-58.6%	539	57.9%	53.8-62.0%	
75 years and older										0.6
Yes	319	34.0%	30.0-38.1%	87	35.8%	28.0-43.7%	232	33.4%	28.7-38.1%	
No	592	66.0%	61.9-70.0%	160	64.2%	56.3-72.0%	432	66.6%	61.9-71.3%	

* Reports engaging in either 30 minutes of moderate physical activity 5 times/week or 20 minutes of vigorous physical activity 3 times/week

Maryland Cancer Survivor Report, 2009

TABLE 7-10 ADULTS THAT MEET THE HEALTHY PEOPLE 2010 GOALS FOR EITHER WEEKLY MODERATE OR VIGOROUS PHYSICAL ACTIVITY* BY CANCER SURVIVOR STATUS AND DEMOGRAPHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Sex										
Male										0.003
Yes	1432	51.2%	48.4-54.0%	150	40.1%	32.8-47.3%	1282	52.0%	49.1-54.9%	
No	1504	48.8%	46.0-51.6%	190	59.9%	52.7-67.2%	1314	48.0%	45.1-50.9%	
Female										0.46
Yes	2176	46.3%	44.2-48.3%	234	44.2%	38.7-49.7%	1942	46.4%	44.3-48.6%	
No	2694	53.7%	51.7-55.8%	326	55.8%	50.3-61.3%	2368	53.6%	51.4-55.7%	
Race										
White										0.015
Yes	2849	51.2%	49.4-53.0%	346	45.7%	41.3-50.2%	2503	51.8%	49.8-53.7%	
No	3035	48.8%	47.0-50.6%	433	54.3%	49.8-58.7%	2602	48.2%	46.3-50.2%	
African American or Black										0.26
Yes	478	43.0%	39.3-46.8%	24	35.1%	21.4-48.7%	454	43.4%	39.5-47.3%	
No	783	57.0%	53.2-60.7%	56	64.9%	51.3-78.6%	727	56.6%	52.7-60.5%	
Other										0.087
Yes	229	47.9%	41.8-54.0%	10	28.2%	7.5-48.8%	219	48.7%	42.5-55.0%	
No	305	52.1%	46.0-58.2%	16	71.8%	51.2-92.5%	289	51.3%	45.0-57.5%	
Education										
Less than high school										0.0004
Yes	156	40.2%	32.3-48.0%	15	16.4%	6.7-26.0%	141	42.1%	33.8-50.5%	
No	331	59.8%	52.0-67.7%	51	83.6%	74.0-93.3%	280	57.9%	49.5-66.2%	
High school grad or GED										0.004
Yes	818	45.9%	42.2-49.5%	81	33.2%	25.0-41.3%	737	46.8%	42.9-50.7%	
No	1162	54.1%	50.5-57.8%	153	66.8%	58.7-75.0%	1009	53.2%	49.3-57.1%	
Some college 1-3 years										0.43
Yes	855	50.5%	46.8-54.1%	102	46.4%	36.5-56.4%	753	50.8%	47.0-54.6%	
No	975	49.5%	45.9-53.2%	113	53.6%	43.6-63.5%	862	49.2%	45.4-53.0%	
College grad or more										0.55
Yes	1770	50.4%	48.1-52.7%	185	48.3%	41.5-55.2%	1585	50.5%	48.1-53.0%	
No	1714	49.6%	47.3-51.9%	198	51.7%	44.8-58.5%	1516	49.5%	47.0-51.9%	
Area of Residence										
Urban										0.017
Yes	1897	48.7%	46.6-50.8%	186	41.8%	36.2-47.4%	1711	49.2%	47.0-51.4%	
No	2225	51.3%	49.2-53.4%	248	58.2%	52.6-63.8%	1977	50.8%	48.6-53.0%	
Rural										0.081
Yes	1679	49.2%	46.9-51.5%	196	43.9%	38.0-49.8%	1483	49.6%	47.2-52.1%	
No	1930	50.8%	48.5-53.1%	266	56.1%	50.2-62.0%	1664	50.4%	47.9-52.8%	

* Reports engaging in either 30 minutes of moderate physical activity 5 times/week or 20 minutes of vigorous physical activity 3 times/week

81

Total number of responses may not equal sample
total due to missing data for some characteristics

TABLE 7-11 AMONG CANCER SURVIVORS, ADULTS THAT MEET THE HEALTHY PEOPLE 2010 GOALS FOR EITHER WEEKLY MODERATE OR VIGOROUS PHYSICAL ACTIVITY* BY DEMOGRAPHIC CHARACTERISTICS

	N	wt %	95% CI	P-value
Sex				0.37
Male				
Yes	150	40.1%	32.8-47.3%	
No	190	59.9%	52.7-67.2%	
Female				
Yes	234	44.2%	38.7-49.7%	
No	326	55.8%	50.3-61.3%	
Age				0.23
18-49				
Yes	58	43.3%	30.6-56.1%	
No	67	56.7%	43.9-69.4%	
50-64				
Yes	119	41.9%	34.6-49.3%	
No	165	58.1%	50.7-65.4%	
65-74				
Yes	118	49.8%	41.4-58.3%	
No	119	50.2%	41.7-58.6%	
75 years and older				
Yes	87	35.8%	27.9-43.7%	
No	160	64.2%	56.3-72.1%	
Race				0.051
White				
Yes	346	45.7%	41.3-50.2%	
No	433	54.3%	49.8-58.7%	
Non-white				
Yes	34	32.6%	20.8-44.4%	
No	72	67.4%	55.6-79.2%	
Education				0.0003
Less than high school				
Yes	15	16.4%	6.7-26.0%	
No	51	83.6%	74.0-93.3%	
High school grad or GED				
Yes	81	33.2%	25.0-41.3%	
No	153	66.8%	58.7-75.0%	
Some college 1-3 years				
Yes	102	46.4%	36.4-56.4%	
No	113	53.6%	43.6-63.6%	
College grad or more				
Yes	185	48.3%	41.5-55.2%	
No	198	51.7%	44.8-58.5%	
Area of Residence				0.61
Urban				
Yes	186	41.8%	36.1-47.4%	
No	248	58.2%	52.6-63.9%	
Rural				
Yes	196	43.9%	38.0-49.9%	
No	266	56.1%	50.1-62.1%	

* Reports engaging in either 30 minutes of moderate physical activity 5 times/week or 20 minutes of vigorous physical activity 3 times/week

Total number of responses may not equal sample total
due to missing data for some characteristics

Maryland Cancer Survivor Report, 2009

TABLE 7-12. AMONG CANCER SURVIVORS, ADULTS THAT MEET THE HEALTHY PEOPLE 2010 GUIDELINE FOR EITHER WEEKLY MODERATE OR VIGOROUS PHYSICAL ACTIVITY* BY YEARS SINCE CANCER DIAGNOSIS

Meet Goals	Total			0-5 Years since Diagnosis			6-10 Years since Diagnosis			11 Years or More since Diagnosis			P-value
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	
Yes	380	43.5%	39.1-47.9%	141	48.7%	41.3-56.0%	75	38.4%	28.9-47.9%	164	42.0%	35.3-48.6%	0.2
No	494	56.5%	52.1-60.9%	160	51.3%	44.0-58.7%	108	61.6%	52.1-71.1%	226	58.0%	51.4-64.7%	

* Reports engaging in either 30 minutes of moderate physical activity 5 times/week or 20 minutes of vigorous physical activity 3 times/week

Maryland Cancer Survivor Report, 2009

TABLE 7-13. DAILY SERVINGS OF FRUITS AND VEGETABLES, BY CANCER SURVIVOR STATUS AND AGE GROUP

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Total Sample										0.9
Less than 5 servings	5874	72.2%	70.7-73.7%	680	72.5%	68.6-76.3%	5194	72.2%	70.6-73.8%	
5 servings or more	2256	27.8%	26.3-29.3%	255	27.5%	23.7-31.4%	2001	27.8%	26.2-29.4%	
18-49 years										0.2
Less than 5 servings	2297	72.9%	70.6-75.3%	83	65.6%	53.7-77.6%	2214	73.1%	70.8-75.5%	
5 servings or more	815	27.1%	24.7-29.4%	42	34.4%	22.4-46.3%	773	26.9%	24.5-29.2%	
50-64 years										0.37
Less than 5 servings	1894	71.9%	69.7-74.2%	210	74.8%	68.6-80.9%	1684	71.7%	69.2-74.1%	
5 servings or more	739	28.1%	25.8-30.3%	78	25.2%	19.1-31.4%	661	28.3%	25.9-30.8%	
65-74 years										0.15
Less than 5 servings	925	72.7%	69.5-75.9%	193	77.4%	70.8-83.9%	732	71.7%	68.0-75.3%	
5 servings or more	351	27.3%	24.1-30.5%	57	22.6%	16.1-29.2%	294	28.3%	24.7-32.0%	
75 years and older										0.34
Less than 5 servings	688	67.8%	64.1-71.6%	189	70.9%	63.8-78.0%	499	66.7%	62.3-71.2%	
5 servings or more	312	32.2%	28.4-35.9%	76	29.1%	22.0-36.2%	236	33.3%	28.8-37.7%	

Sample by age does not equal the total sample, due to some respondents with missing age   Maryland Cancer Survivor Report, 2009

TABLE 7-14. DAILY SERVINGS OF FRUITS AND VEGETABLES, BY CANCER SURVIVOR STATUS AND DEMOGRAPHIC CHARACTERISTICS

	Total Sample			Cancer Survivors			Respondents without Cancer			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Sex										
Male										0.13
Less than 5 servings	2378	76.1%	73.7-78.5%	281	80.6%	75.3-85.8%	2097	75.8%	73.2-78.4%	
5 servings or more	661	23.9%	21.5-26.3%	71	19.4%	14.2-24.7%	590	24.2%	21.6-26.8%	
Female										0.3
Less than 5 servings	3496	68.7%	66.9-70.5%	399	66.0%	60.8-71.3%	3097	68.9%	67.0-70.9%	
5 servings or more	1595	31.3%	29.5-33.1%	184	34.0%	28.7-39.2%	1411	31.1%	29.1-33.0%	
Race										
White										0.18
Less than 5 servings	4448	73.5%	72.0-75.1%	584	70.9%	66.9-75.0%	3864	73.8%	72.2-75.4%	
5 servings or more	1687	26.5%	24.9-28.0%	224	29.1%	25.0-33.1%	1463	26.2%	24.6-27.8%	
African American or Black										0.18
Less than 5 servings	962	72.5%	69.2-75.8%	69	81.4%	70.0-92.8%	893	72.1%	68.7-75.5%	
5 servings or more	343	27.5%	24.2-30.8%	14	18.6%	7.2-30.0%	329	27.9%	24.5-31.3%	
Other										0.47
Less than 5 servings	374	67.2%	61.3-73.1%	19	74.7%	55.7-93.7%	355	66.9%	60.8-73.0%	
5 servings or more	176	32.8%	26.9-38.7%	9	25.3%	6.3-44.3%	167	33.1%	27.0-39.2%	
Education										
Less than high school										0.3
Less than 5 servings	431	78.6%	72.3-85.0%	59	85.1%	74.9-95.4%	372	78.1%	71.3-84.9%	
5 servings or more	89	21.4%	15.0-27.7%	12	14.9%	4.6-25.1%	77	21.9%	15.1-28.7%	
High school grad or GED										0.3
Less than 5 servings	1668	78.0%	74.8-81.1%	200	81.9%	75.1-88.7%	1468	77.7%	74.3-81.1%	
5 servings or more	433	22.0%	18.9-25.2%	43	18.1%	11.3-24.9%	390	22.3%	18.9-25.7%	
Some college 1-3 years										0.49
Less than 5 servings	1372	73.7%	70.7-76.8%	160	70.9%	62.5-79.2%	1212	73.9%	70.7-77.2%	
5 servings or more	541	26.3%	23.2-29.3%	68	29.1%	20.8-37.5%	473	26.1%	22.8-29.3%	
College grad or more										0.8
Less than 5 servings	2383	67.4%	65.3-69.6%	259	66.7%	60.5-72.8%	2124	67.5%	65.2-69.8%	
5 servings or more	1184	32.6%	30.4-34.7%	132	33.3%	27.2-39.5%	1052	32.5%	30.2-34.8%	
Area of Residence										
Urban										0.94
Less than 5 servings	2995	71.2%	69.3-73.1%	321	71.4%	66.4-76.4%	2674	71.2%	69.2-73.2%	
5 servings or more	1273	28.8%	26.9-30.7%	128	28.6%	23.6-33.6%	1145	28.8%	26.8-30.8%	
Rural										0.79
Less than 5 servings	2812	75.0%	73.0-77.0%	356	75.6%	71.0-80.3%	2456	74.9%	72.8-77.0%	
5 servings or more	968	25.0%	23.0-27.0%	126	24.4%	19.7-29.0%	842	25.1%	23.0-27.2%	

TABLE 7-15. AMONG CANCER SURVIVORS, DAILY SERVINGS OF FRUITS AND VEGETABLES, BY DEMOGRAPHIC CHARACTERISTICS

	N	wt %	95% CI	P-value
Sex				0.0002
Male				
Less than 5 servings	281	80.6%	75.3-85.9%	
5 servings or more	71	19.4%	14.1-24.7%	
Female				
Less than 5 servings	399	66.0%	60.8-71.3%	
5 servings or more	184	34.0%	28.7-39.2%	
Age				0.23
18-49				
Less than 5 servings	83	65.6%	53.6-77.6%	
5 servings or more	42	34.4%	22.4-46.4%	
50-64				
Less than 5 servings	210	74.8%	68.6-80.9%	
5 servings or more	78	25.2%	19.1-31.4%	
65-74				
Less than 5 servings	193	77.4%	70.8-83.9%	
5 servings or more	57	22.6%	16.1-29.2%	
75 years and older				
Less than 5 servings	189	70.9%	63.8-78.0%	
5 servings or more	76	29.1%	22.0-36.2%	
Race				0.17
White				
Less than 5 servings	584	70.9%	66.9-75.0%	
5 servings or more	224	29.1%	25.0-33.1%	
Non-white				
Less than 5 servings	88	79.0%	69.2-88.8%	
5 servings or more	23	21.0%	11.2-30.8%	
Education				0.005
Less than high school				
Less than 5 servings	59	85.1%	74.9-95.4%	
5 servings or more	12	14.9%	4.6-25.1%	
High school grad or GED				
Less than 5 servings	200	81.9%	75.1-88.7%	
5 servings or more	43	18.1%	11.3-24.9%	
Some college 1-3 years				
Less than 5 servings	160	70.9%	62.4-79.3%	
5 servings or more	68	29.1%	20.7-37.6%	
College grad or more				
Less than 5 servings	259	66.7%	60.5-72.8%	
5 servings or more	132	33.3%	27.2-39.5%	
Area of Residence				0.22
Urban				
Less than 5 servings	321	71.4%	66.4-76.4%	
5 servings or more	128	28.6%	23.6-33.6%	
Rural				
Less than 5 servings	356	75.6%	71.0-80.3%	
5 servings or more	126	24.4%	19.7-29.0%	

Total number of responses may not equal smasple total
due to missing data for some characteristics

Marylanld Cancer Survivor Report, 2009

TABLE 7-16. AMONG CANCER SURVIVORS, DAILY SERVINGS OF FRUITS AND VEGETABLES, BY YEARS SINCE CANCER DIAGNOSIS

Daily Servings of Fruits and Vegetables	Total			0-5 Years since Diagnosis			6-10 Years since Diagnosis			11 Years or More since Diagnosis			
	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	N	wt %	95% CI	P-value
Less than 5 servings	659	72.3%	68.4-76.3%	230	71.2%	64.5-78.0%	141	73.4%	65.2-81.6%	288	72.7%	66.8-78.6%	0.91
5 servings or more	245	27.7%	23.7-31.6%	80	28.8%	22.0-35.5%	49	26.6%	18.4-34.8%	116	27.3%	21.4-33.2%	

Maryland Cancer Survivor Report, 2009

Section 8
Health Care after the Cancer Diagnosis

As cancer patients leave the active treatment phase and enter post-treatment care, it is essential that they have continued coordinated care to optimize their well being. Survivors need routine medical care, not only to monitor for recurrent or new primary cancers, but also for surveillance and treatment of chronic medical diseases, to enhance discussions about healthy lifestyles, and to treat the potential side effects of cancer treatment. It is critical that survivors understand their cancer and its treatment.

Toward this end the IOM report *From Cancer Patient to Cancer Survivor* has made several recommendations for patient care, some of which were examined in the 2009 BRFSS survey.

Survivorship Care Plan

One IOM recommendation is that following cancer treatment, patients should receive a detailed care summary and follow-up plan that is clearly explained. This 'Survivorship Care Plan' should be written by the provider(s) who coordinated the cancer treatment. This written summary should include the cancer type, what treatments were utilized and their possible consequences, what follow-up is needed, and when follow-up is needed.

The following points summarize information from cancer survivors in Maryland on the receipt of information in accordance with a Survivorship Care Plan (Table 8-1).

- When asked whether they had ever received a written summary from their health care provider of the all cancer treatments received, 44.7% replied 'Yes.'
  - The percentage of cancer survivors receiving written summaries of their treatments has improved with time, with 64.8% of those diagnosed within the last 2 years receiving written summaries compared to 25.4% of those diagnosed 21 or more years ago.
- A much higher percentage of cancer survivors (77.6%) reported they had received instructions from a health care professional about where to return or who to see for routine cancer check-ups following treatment completion.
- Of those who received instructions for follow-up treatment, 66.9% said they were written down or printed on paper.
  - The percentage of survivors receiving instructions for follow-up has also improved with time; 83.1% of those diagnosed within the last 2 years reported receiving follow-up instructions, compared to 63.9% of those diagnosed 21 or more years ago. Among those diagnosed within the last 2 years, 74.5% reported receiving instructions in written form; only 49.9% of those diagnosed 21 or more years ago reported receiving written instructions, though this measure was not statistically significant.

Health Insurance

The cost of cancer care can be staggering for those receiving acute treatment and for cancer survivors. Cancer is cited as one of the three most expensive conditions to live with in the U.S.[1] and about half of all families that file for bankruptcy in the U.S. cited medical causes.[2] Although the majority of Americans do have health insurance, those without insurance often delay seeking medical care or receive inferior services, which has been shown to lead to overall poor outcomes for a variety of different cancers.[3,4,5,6]

The following points summarize the responses on health insurance.

- With their most recent cancer diagnosis, 8.3% of cancer survivors <u>did not</u> have health insurance that paid all or part of the cancer treatment.
    - This percentage rose to 21% for those diagnosed with cancer within the last 2 years.
- Almost 12% of survivors reported ever being denied health or life insurance coverage because of the cancer diagnosis.

Clinical Trials

The use of clinical trials is one key way to advance cancer research. Nationally, 3-5% of adult cancer patients participate in clinical trials although up to 20% are eligible.[7] Patients in the state of Maryland are in a unique position to participate in clinical trials due to proximity to large government medical centers such as National Institutes of Health (including the National Cancer Institute), and numerous academic medical institutions in the Baltimore-Washington metropolitan area. In the state of Maryland,

- 6.5% of cancer survivors reported participating in a clinical trial as part of the cancer treatment.

Pain Management

Chronic pain is a significant problem noted by many cancer survivors, related to the cancer itself and to cancer treatment. Pain management is vital to improving quality of life for survivors.

In the state of Maryland,

- 10.8% of cancer survivors reported they currently have pain due to their cancer or cancer treatment.
    - When stratified by time since diagnosis, those diagnosed within the last 2 years had the greatest proportion with current pain (20.9%). Twelve percent (12.0%) of persons diagnosed 3-5 years ago and 5.9-8.7% of those diagnosed 6 or more years ago, reported current pain.
- Of all cancer survivors who reported current pain, only 60.3% said their pain is under control.

Summary

There are numerous factors that contribute to the overall health care of patients after a cancer diagnosis. After initial diagnosis and initiation of treatment, great care should be taken to keep survivors connected to health care resources, and to provide opportunities to address their subsequent medical issues.

One method for maintaining continuous health care for cancer survivors is to provide them with a Survivorship Care Plan following completion of treatment. In Maryland, less than half (44.7%) of cancer survivors reported receiving a written summary of treatments and 77.6% received instructions on their follow-up care. Although these numbers are low, they appear to be increasing with time, as seen in Table 8-1.

One in every 12 cancer survivors in Maryland (8.3%) had no health insurance coverage for any of their treatment. Among those diagnosed within the last 2 years, about one in five (21%) cancer survivors had no health insurance coverage for their cancer treatment. Furthermore, 11.6% of Maryland cancer survivors reported having been denied health or life insurance because of their cancer.

In Maryland, 6.5% of cancer survivors reported participation in clinical trials for their cancer treatment, which is higher than the national average for cancer patients. However, this still falls far short of the percentage of people with cancer who would be eligible to participate in clinical trials.

Current physical pain caused by cancer or cancer treatment was reported by 10.8% of cancer survivors in Maryland, although only 60.3% of those patients reported that their pain was currently under control.

---

[1] Cohen JW, Krauss NA. Spending and service use among people with the fifteen most costly medical conditions, 1997. Health Aff (Millwood) 2003 Mar-Apr;22(2):129-38.

[2] Himmelstein DU, Warren E, Thorne D, Woolhandler S. Illness and injury as contributors to bankruptcy. Health Aff (Millwood) 2006 Mar-Apr;25(2):w74-83.

[3] Yim J, Hwang SS, Yoo KY, Kim CY. Contribution of income-related inequality and healthcare utilization to survival in cancers of the lung, liver, stomach and colon. J Epidemiol Community Health 2010 Oct 19 [Epub ahead of print].

[4] Ayanian JZ, Kohler BA, Abe T, Epstein AM. The relation between health insurance coverage and clinical outcomes among women with breast cancer. N Engl J Med 1993 Jul 29;329(5):326-31.

[5] Lee-Feldstein A, Feldstein PJ, Buchmueller T, Katterhagen G. The relationship of HMOs, health insurance, and delivery systems to breast cancer outcomes. Med Care 2000 Jul;38(7):693-5.

[6] Penson DF, Stoddard ML, Pasta DJ, et al. The association between socioeconomic status, health insurance coverage, and quality of life in men with prostate cancer. J Clin Epidemiol 2001 Apr;54(4):350-8.

[7] American Cancer Society Cancer Action Network. Indiana Action Center: Clinical Trials. Available at: http://acscan.org/action/in/campaigns/clincaltrials. Accessed March 7, 2011.

TABLE 8-1. QUESTIONS SPECIFIC TO CANCER SURVIVORS CONCERNING CANCER TREATMENT AND POST-TREATMENT CARE

	N	n	wt %	95% CI	P-value
Are you currently receiving treatment for cancer?					0.12
Total	418	48	10.6%	7.0-14.1%	
0-2 years since diagnosis	79	12	11.6%	4.0-19.2%	
3-5 years since diagnosis	70	15	18.7%	7.8-29.6%	
6-10 years since diagnosis	80	4	3.1%	0.0-6.4%	
11-20 years since diagnosis	91	10	10.1%	2.5-17.6%	
21 years or more since diagnosis	80	6	11.0%	0.7-21.2%	
Did a doctor, nurse or other HCP ever give you a written summary of all the cancer treatments you received?					0.01
Total	355	128	44.7%	37.5-51.9%	
0-2 years since diagnosis	67	33	64.8%	50.5-79.1%	
3-5 years since diagnosis	52	23	54.8%	37.3-72.3%	
6-10 years since diagnosis	75	28	38.2%	24.6-51.8%	
11-20 years since diagnosis	75	27	41.2%	23.4-59.1%	
21 years or more since diagnosis	69	14	25.4%	11.7-39.2%	
Have you ever received instructions from a doctor, nurse, or other HCP about *where* you should return or *who* you should see for routine cancer check-ups after completing treatment for cancer?					0.042
Total	359	263	77.6%	71.9-83.2%	
0-2 years since diagnosis	67	55	83.1%	71.4-94.9%	
3-5 years since diagnosis	53	45	88.1%	78.3-97.9%	
6-10 years since diagnosis	74	61	84.0%	74.7-93.4%	
11-20 years since diagnosis	80	51	69.6%	54.1-85.1%	
21 years or more since diagnosis	70	42	63.9%	50.1-77.7%	
If yes, were these instructions written down or printed on paper for you?					0.13
Total	244	157	66.9%	59.4-74.3%	
0-2 years since diagnosis	54	40	74.5%	60.4-88.5%	
3-5 years since diagnosis	44	30	78.9%	65.5-92.3%	
6-10 years since diagnosis	56	31	58.4%	42.2-74.7%	
11-20 years since diagnosis	46	31	68.7%	51.3-86.2%	
21 years or more since diagnosis	36	21	49.9%	30.5-69.2%	
With your most recent diagnosis of cancer, did you have health insurance that paid for all or part of your cancer treatment?					0.007
Total	358	341	91.7%	86.8-96.7%	
0-2 years since diagnosis	65	59	79.0%	62.6-95.4%	
3-5 years since diagnosis	55	53	98.3%	95.8-100%	
6-10 years since diagnosis	75	72	97.6%	93.8-100%	
11-20 years since diagnosis	80	77	91.9%	80.1-100%	
21 years or more since diagnosis	71	70	96.9%	90.9-100%	
Were you ever denied health insurance or life insurance coverage because of your cancer?					0.19
Total	367	33	11.6%	6.7-16.5%	
0-2 years since diagnosis	67	6	12.9%	1.8-24.1%	
3-5 years since diagnosis	54	1	1.0%	0.0-2.9%	
6-10 years since diagnosis	75	10	19.4%	6.7-32.1%	
11-20 years since diagnosis	81	7	11.5%	0.0-23.6%	
21 years or more since diagnosis	74	9	12.8%	2.6-23.0%	

* Sample by years since diagnosis does not equal total, due to missing data

Maryland Cancer Survivor Report, 2009

TABLE 8-1. QUESTIONS SPECIFIC TO CANCER SURVIVORS CONCERNING CANCER TREATMENT AND POST-TREATMENT CARE

	N	n	wt %	95% CI	P-value
Did you participate in a clinical trial as part of your cancer treatment?					0.015
Total	362	20	6.5%	3.0-10.0%	
0-2 years since diagnosis	64	6	11.2%	1.1-21.3%	
3-5 years since diagnosis	55	1	0.8%	0.0-2.5%	
6-10 years since diagnosis	73	5	10.8%	0.6-21.0%	
11-20 years since diagnosis	80	3	0.8%	0.0-1.8%	
21 years or more since diagnosis	74	3	5.3%	0.0-12.2%	
Do you currently have physical pain caused by your cancer or cancer treatment?					0.1
Total	363	40	10.8%	6.7-14.9%	
0-2 years since diagnosis	66	14	20.9%	7.4-34.3%	
3-5 years since diagnosis	54	7	12.0%	1.9-22.2%	
6-10 years since diagnosis	74	7	8.7%	1.3-16.0%	
11-20 years since diagnosis	81	5	5.9%	0.0-11.8%	
21 years or more since diagnosis	73	6	7.7%	1.1-14.4%	
Is your pain currently under control?					NA
Total	40	31	60.3%	37.9-82.6%	
0-2 years since diagnosis	14	10	38.4%	8.4-68.4%	
3-5 years since diagnosis	7	5	56.9%	7.3-100%	
6-10 years since diagnosis	7	7	100.0%	100.0-100.0%	
11-20 years since diagnosis	5	4	62.7%	6.7-100.0%	
21 years or more since diagnosis	6	4	80.8%	51.4-100.0%	

* Sample by years since diagnosis does not equal total, due to missing data

Maryland Cancer Survivor Report, 2009