

## Health Behaviors in Cancer Survivors

Significant progress in cancer diagnosis and treatment since the 1950s has led to a growing population of cancer survivors. There are currently more than 11.9 million cancer survivors in the United States. This number is expected to continue to grow as the U.S. population ages. Cancer survivors face physical, psychological, social, spiritual, and financial challenges. Many of these issues could be addressed through public health initiatives to prevent secondary disease and cancer recurrence and by improving quality of life for cancer survivors.

Members of the national cancer program, including NCI, the Centers for Disease Control and Prevention (CDC), and the American Cancer Society (ACS), provide resources and data for working with cancer survivor populations. This HINTS Brief highlights some of those resources.

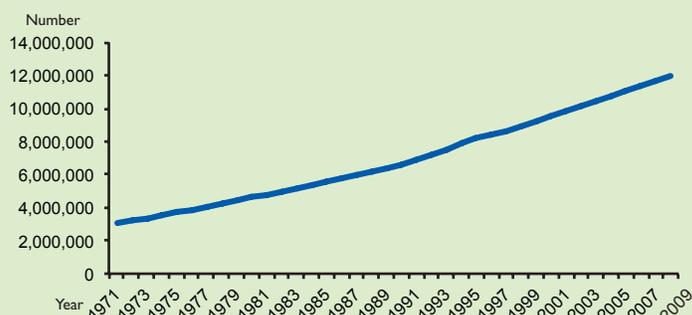
The ACS publication *Survivorship: During and After Treatment* offers the following recommendations for staying healthy during and after treatment for cancer:

- **Eat healthy:** good nutrition during and after treatment for cancer may help survivors feel better, keep up strength, maintain nutrient stores, tolerate treatment side effects, lower risk of infection, and promote recovery.
- **Get active:** physical activity during and after treatment for cancer can help survivors maintain physical abilities, lower risk of injury, reduce muscle wasting, lower risk of chronic disease, reduce nausea, reduce psychological distress, improve social contact, reduce fatigue, maintain weight, and improve overall quality of life.
- **Control weight:** through appropriate nutrition and activity, cancer survivors can work toward maintaining a healthy weight and thereby lower risk of disease and improve quality of life.
- **Avoid tobacco:** quitting smoking can help cancer survivors lower risk of lung cancer, other cancers, heart attack, stroke, and chronic lung diseases such as emphysema and chronic bronchitis.
- **Find cancer early:** engaging in recommended screening for certain cancers can help survivors detect cancer early, when the cancer is more responsive to treatment.

## Quick Facts

- There are currently more than 11.9 million cancer survivors in the U.S., representing approximately 4 percent of the population.
- Healthy lifestyle choices during and after treatment for cancer can improve quality of life in survivors.
- Cancer survivors face numerous challenges including physical, psychological, social, spiritual, and financial issues that can be addressed through public health initiatives and targeted interventions.
- Cancer survivors, like most Americans, have room for improvement on many health protective behaviors.

### Estimated Number of Cancer Survivors in the United States from 1971 to 2008



Data source: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008. National Cancer Institute. Bethesda, MD. [http://seer.cancer.gov/csr/1975\\_2008/](http://seer.cancer.gov/csr/1975_2008/), based on November 2010 SEER data submission, posted to the SEER website, 2011.

## National Action Plan for Cancer Survivorship

The CDC partnered with LIVESTRONG to create *A National Action Plan for Cancer Survivorship: Advancing Public Health Strategies*.

The plan describes public health interventions to improve the health and well-being of cancer survivors.

By adopting the National Action Plan, the public health community can seize an important opportunity to improve quality of life among cancer survivors.



## Cancer survivors not more likely to engage in health protective behaviors

A study using HINTS data from 2003 examined smoking, fruit and vegetable consumption, and physical activity among cancer survivors. Investigators found that, like most Americans, cancer survivors have room for improvement on several healthy lifestyle behaviors. Despite having higher risks for cancer and other chronic diseases, cancer survivors were no more likely than the general population to engage in health protective behaviors.

### Smoking

No significant differences were observed in smoking prevalence between cancer survivors (22.5 percent) and those without a history of cancer (18.4 percent). Population estimates for both groups are higher than the ACS 2015 Goal for smoking prevalence of 12 percent, suggesting room for improvement.

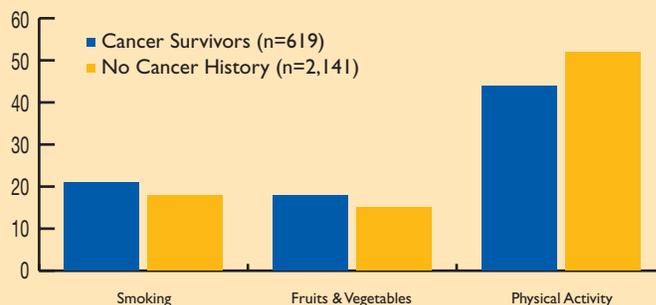
### Fruit and Vegetable Consumption

The proportion of cancer survivors (18 percent) eating at least five fruits or vegetables per day was not significantly different than those without a history of cancer (14.9 percent) and was considerably higher than the ACS 2015 Goal for fruit and vegetable consumption of 75 percent of the adult population, suggesting significant room for improvement in all adults, regardless of medical history.

### Physical Activity

The proportion of cancer survivors who reported being physically active on a weekly basis was significantly lower among cancer survivors (45.3 percent) compared to those without cancer (53 percent). These estimates do not meet the ACS 2015 Goals for physical activity wherein 60 percent of adults engage in at least 30 minutes of moderate to vigorous physical activity on five or more days per week.

### Smoking, fruit and vegetable consumption, and physical activity among cancer survivors vs. those with no cancer history



Data Source: Health Information National Trends Survey, 2003 (HINTS, 2003)

## How Can This Inform Your Work?

Data from HINTS about the health behaviors of cancer survivors point to public health opportunities to promote health and well-being during cancer survivorship. The ACS recommendations for healthy behavior during survivorship can be promoted using the communication and education strategies outlined in *A National Action Plan for Cancer Survivorship*.

- Structure existing and develop new messages about cancer survivorship to reach three broad audiences: the public, cancer survivors, and health care providers.

- Tailor the content and delivery of these existing and/or developed messages for subgroups (e.g., culturally diverse groups, various health care professionals) within each of the three main audiences.
- Use factual, consistent, culturally appropriate language and information.

#### Other resources:

- NCI's *Facing Forward* series
- IOM Report *From Cancer Patient to Cancer Survivor: Lost in Transition*

#### About HINTS

<http://hints.cancer.gov>  
<http://www.facebook.com/ncihints>  
<http://www.twitter.com/NCIHINTS>

The National Cancer Institute (NCI) fielded the first Health Information National Trends Survey (HINTS) in 2002 and 2003, surveying 6,369 Americans. Subsequent surveys followed in 2005 (5,586 Americans surveyed) and 2008 (7,674 Americans surveyed). HINTS was created to monitor changes in the rapidly evolving field of health communication. The survey data can be used to understand how adults use different communication channels to obtain health information for themselves and their loved ones, and to create more effective health communication strategies across populations.

HINTS Briefs provide a snapshot of noteworthy, data-driven research findings. They introduce population-level estimates for specific questions in the survey and summarize significant research findings that are a result of analyzing how certain demographic characteristics influence specific outcomes. Many Briefs summarize research findings from recent peer-reviewed journal articles using HINTS data.

## For More Information on Cancer

- Call the NCI Cancer Information Service at 1-800-4-CANCER
- Visit <http://cancer.gov>
- Order NCI publications at <https://cissecure.nci.nih.gov/ncipubs/>

## References Used in This HINTS Brief

- American Cancer Society. Survivorship: During and After Treatment. URL: <http://www.cancer.org/Treatment/SurvivorshipDuringandAfterTreatment/index> Accessed September 27, 2011.
- Centers for Disease Control and Prevention and the Lance Armstrong Foundation. A national action plan for cancer survivorship: Advancing public health strategies. Source: [http://www.cdc.gov/cancer/survivorship/what\\_cdc\\_is\\_doing/action\\_plan.htm](http://www.cdc.gov/cancer/survivorship/what_cdc_is_doing/action_plan.htm) Accessed September 27, 2011.
- Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, [http://seer.cancer.gov/csr/1975\\_2008/](http://seer.cancer.gov/csr/1975_2008/), based on November 2010 SEER data submission, posted to the SEER website, 2011.
- Mayer DK, Terrin NC, Menon U, Kreps GL, McCance K, Parsons SK, Mooney KH. 2007 Health behaviors in cancer survivors. *Oncol Nurs Forum* 34(3):643-51.

