

# CANCER PREVENTION STUDY-3

Research today for a cancer-free tomorrow.

# Spring 2014

# **Letter from Principal Investigator**

Dear Cancer Prevention Study-3 Participants,

I am very excited to share our success in completing the recruitment of more than 300,000 CPS-3 participants in December 2013! Since the 1950s, more than 2.5 million dedicated study participants like you have joined the Cancer Prevention Studies, and your commitment to these vital research efforts has helped us better understand what causes cancer so that we can ultimately prevent it.

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Page 4 Get Ready for 2015 Now that we have completed the initial recruitment of our participants, we will be shifting our efforts to the next phase of the study called follow-up. In this newsletter, we will share what happens next for you, so you know what to expect and when, including our first follow-up survey to be mailed to you in May 2015.

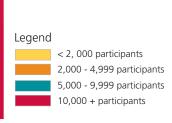
Over the past several years, I attended many of our enrollments nationwide, and I was moved by the passion of our study participants fighting back against this disease in honor or memory of a loved one. Together, we built a groundbreaking study that affords us the opportunity to truly change the face of cancer for the next generation.

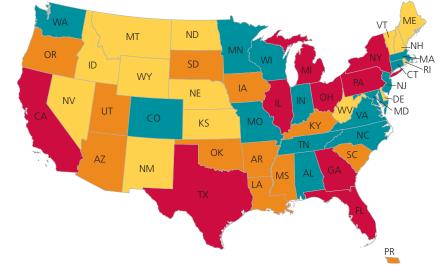
With gratitude, Alpa V. Patel, PhD Principal Investigator, CPS-3

# **CPS-3 Participant Profile:**

Want to know who has joined in the fight against cancer by participating in one of the largest cancer research studies in the United States? With more than 304,000 participants enrolled in the study, 77% are female and 23% are male. The median age of participants is 48 years, and 74% are currently married. Minority populations represent 17% of all CPS-3 participants, which is important because these populations are underrepresented in cancer research. CPS-3 has participants from all over the United States and Puerto Rico; below is a map detailing the amount of participation from 48 out of the 50 states.

## **State of Residence for CPS-3 Participants**







## **Coffee and Mouth and Throat Cancer**

There may be more to a "cup of Joe" than just helping you wake up. A study by American Cancer Society researchers suggests that drinking four or more cups of caffeinated coffee a day reduces the risk of dying from cancer of the oral cavity or pharynx (also known as mouth and throat cancer) by half. The study appeared in the *American Journal of Epidemiology* last year.

Using the large amount of data collected from the more than one million Cancer Prevention Study-II (CPS-II) participants, researchers were able to examine caffeinated coffee, decaffeinated coffee, and tea separately.

Results from the study showed that drinking four or more cups a day of caffeinated coffee reduced the risk of dying from mouth and throat cancer by half, compared to drinking no coffee or only a cup occasionally. A lower risk with decaffeinated coffee (decaf) was also suggested, but the statistical evidence to support that finding was not quite as compelling as that for caffeinated coffee. No association was found for drinking tea.

Although the results of this study are intriguing, the authors are not recommending that people start drinking or drink more coffee for cancer prevention. Janet S. Hildebrand, MPH, lead author of the study says, "We would need much more scientific and clinical evidence of a protective effect of coffee against cancer at multiple sites to support such a recommendation. Rather this is just a bit of good news for coffee drinkers."

# **Sleep Disruption and Fatal Prostate** and Ovarian Cancer

A review of research literature by an international panel of experts found that shift work involving circadian rhythm disruption showed a probable increase in the risk of breast cancer. However, they also found that other cancer sites deserved further research. Thus, using data collected from employed men and women in CPS-II, two new studies by American Cancer Society researchers examined the possible associations of factors related to circadian disruption (more specifically shift work, sleep duration, and insomnia) with the risk of dying from prostate cancer in men and ovarian cancer in women.

Both studies were published in the *American Journal of Preventive Medicine* in February 2014. The first study, led by Susan Gapstur, PhD, MPH, found that shift work and insomnia were not associated with a risk of fatal prostate cancer. However, men who reported sleeping 3-5 hours per night had 64% higher risk of dying from prostate cancer than men who slept 7 hours per night. The second study, led by Brian Carter, MPH, found that women who reported working a rotating shift, compared to women who worked a fixed daytime work schedule, were associated with a 27% higher risk of fatal ovarian cancer. Neither sleep duration nor insomnia was associated with risk.

These findings suggest that factors associated with circadian rhythm disruption, such as shift work and sleep duration, may increase the risk of fatal ovarian cancer and prostate cancer, respectively. Further research, however, is necessary to fully understand the role of these factors on cancer risk.

#### Milestones and Major Findings from the Cancer Prevention Studies

#### 1946

The American Cancer Society Research Program begins with \$1 million raised by Mary Lasker

#### 1959

Cancer Prevention Study-I (CPS-I) begins enrollment of 1 million men and women in 25 states

#### 1982

Cancer Prevention
Study-II (CPS-II)
begins enrollment of
1.2 million men and
women in 50 states
and Washington, DC

## 1996

An increase in lung cancer deaths among nonsmoking spouses of smokers is established

#### 2005

Increased consumption of red and processed meat shown to increase risk of colorectal cancer

#### 2007

Daily use of adultstrength aspirin for five or more years was associated with 15% less overall cancer incidence

#### 2011

Consumption of three or more alcoholic beverages per day increases pancreatic cancer mortality, regardless of smoking history

#### 2013

Completion of CPS-3 recruitment of more than 300,000 cancer-free adults from United States and Puerto Rico

#### 1954

American Cancer Society Hammond-Horn Study confirms link between smoking and lung cancer in men

#### 1964

Findings from the Hammond-Horn Study and CPS-I used to support the surgeon general's claim that cigarette smoking is linked to cancer

#### 1991

For the first time, regular low-dose aspirin use shown to reduce the risk of dying from colorectal cancer

#### 2003

A landmark paper from CPS-II concludes that obesity is associated with increased death rates for at least 10 different cancers

#### 2006

Launch of Cancer Prevention Study-3 (CPS-3), a new nationwide cohort of 300,000 cancer-free adults

#### **2010**

Longer time spent sitting shown to be associated with a higher risk of dying prematurely

#### 2012

Weight cycling (weight loss and weight gain) does not increase risk of death

# WHAT'S NEXT?

# **Cancer Registries and CPS-3**

To use the lifestyle and other information CPS-3 participants have provided to learn what can cause or prevent cancer, we need to know which CPS-3 participants have been diagnosed with cancer since they enrolled in the study. Cancer registries can help provide this information.

#### Q. What is a cancer registry?

**A.** Each state has a cancer registry that collects information about new cancer diagnoses. This is how public health officials, researchers, and the general public know how many and what types of cancer are occurring, and whether cancer rates are changing or affecting various racial/ethnic populations differently. For this reason, cancer registries are very important for research studies like CPS-3.

#### Q. How do we find out who has been diagnosed with cancer?

**A.** At the time of enrollment in CPS-3, participants signed an informed consent form and provided information such as name, date of birth, and Social Security number (if you provided it to us). As described in that consent form, we use this information to identify if you have been diagnosed with a cancer since you enrolled in CPS-3 by securely linking to (checking against) computerized records in cancer registries. If information about a cancer diagnosis in a CPS-3 participant is found, it will be provided by the cancer registry to certain American Cancer Society research staff members who are responsible for maintaining records for the CPS-3 study. This information will include the specific type of cancer, when it was diagnosed, other detailed information about the cancer, and what type of treatments were used.

#### Q. How is my information protected?

**A.** Like the information you provide on surveys, information provided by cancer registries to the CPS-3 study is kept confidential as described in the informed consent form. No information from the CPS-3 study will be kept by the cancer registries. As with all aspects of CPS-3, this linkage process and the safeguards put in place to protect personal information are reviewed and approved by an independent Institutional Review Board.

# **Nutrition and Physical Activity Assessment**

Studies have shown that following dietary and physical activity guidelines decreases one's risk of certain cancers, but much more remains to be learned. The 2015 survey for CPS-3 participants will include a comprehensive dietary assessment using an instrument called a food frequency questionnaire (FFQ). The FFQ lists foods and beverages, and asks you to record how often you eat or drink them. It is designed to measure your *usual* diet over the past year. This information is vitally important to help us understand how diet may influence the risk of cancer.

In 2013 we invited 600 participants, randomly selected from different geographic areas and racial/ethnic groups, to participate in a diet substudy. These participants agreed to have a trained interviewer record what they ate in a 24-hour period. This information is being used to finalize the list of foods, beverages, and nutritional supplements on the FFQ to best reflect what CPS-3 participants are eating.

Like the 2013 diet sub-study, participants will be randomly selected and invited to take part in diet and physical activity validation studies, allowing researchers to assess whether what you report on a survey accurately reflects your usual diet and physical activity patterns. In addition to completing the standard follow-up survey, participants involved in the diet validation study may be asked to provide two small blood samples, a urine sample, and participate in the collection of 24-hour dietary recalls over the course of one year. Those in the physical activity validation study will be asked to record their activity in a diary four times throughout the year and simultaneously wear an accelerometer (a device that records their activity).

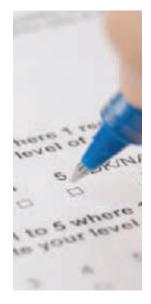
Participation in the validation studies is optional and not a routine part of our follow-up activities, but it is an essential component to maintaining the highest scientific standards. More details will be sent to you if you are randomly selected for one of these studies.





# Have you completed your baseline survey?

Now that CPS-3 enrollment has come to an end, we want to make sure that your enrollment is complete, which includes submission of your baseline survey. Whether you began your enrollment at a Relay For Life® event (including Celebration on the Hill® and Relay For Life summit events), or a Making Strides Against Breast Cancer® event, or if you enrolled at one of our community-wide enrollments, the completion of your baseline survey is essential. This comprehensive baseline survey provides researchers with extremely valuable information about your medical history and lifestyle that can be used to better understand cancer.



### **Contact Information:**

For CPS-3 related questions, call 1-888-604-5888 or email cps3@cancer.org. For cancer resource information and resources 24 hours a day, seven days a week, call 1-800-227-2345 or visit our website at cancer.org.



# Get ready for the 2015 follow-up survey.

The 2015 CPS-3 follow-up survey will be mailed to you in May 2015 and for some of you, this may be the first opportunity to update your information since enrollment. By carefully responding to the survey, you are giving researchers the tools they need to better understand cancer and its impact on communities throughout the United States. Every response to the survey makes a difference, and we hope you will continue to help in the relentless fight against this disease by responding promptly. The more information Society researchers can collect, the stronger and more precise our studies will be.

Thank you for your extraordinary commitment to the American Cancer Society and the Cancer Prevention Studies. You are helping to save lives and create a world with less cancer and more birthdays.



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