Letter from the Principal Investigator

Dear Cancer Prevention Study-3 Participant,

I want to thank you for being one of approximately 100,000 people who has made the commitment to save lives through your enrollment in the American Cancer Society’s Cancer Prevention Study (CPS-3), one of the largest and most important studies of cancer causes and prevention of its kind! The next generation of cancer research would not be possible without you.

CPS-3 enrollment began in 2006, and we are scheduled to end recruitment of new participants in December 2013. Thus, I am asking for your help in encouraging friends, family, coworkers, and neighbors to join CPS-3. To make this easy, we have a template invitation that you can customize and send or email to help spread the word about the study. To access this invitation, please go to cancer.org/cps3, and click on “Read More” next to “Enroll in CPS-3 Today.” In the “Promotion” section, there is a link to the document. The more participants we enroll, the greater the value of our study. So, please help us spread the word!

Thank you again for your ongoing participation in CPS-3 and for helping to create a world with less cancer and more birthdays.

Sincerely, Alpa V. Patel, PhD

Based on Data That You Reported on Your CPS-3 Survey …

Fascinating Facts

- The median age of CPS-3 participants is 46 years old. To enroll, participants must be between the ages of 30 and 65.
- Currently, minority populations represent 13% of all CPS-3 participants. Minority populations are underrepresented in cancer research, but the burden of cancer is often greater in these populations. Let’s get everyone involved to cure cancer everywhere!
- 66% of CPS-3 participants are married, but only about one-quarter of all participants are men. Wives – please encourage your husbands to find an enrollment venue where they can sign up, too!
- 61% of participants eat one to two cups of vegetables each day. Eating well is important to improving your health and reducing your cancer risk.
- 18% of CPS-3 participants spend three to six hours per week engaging in some type of physical activity. Being active reduces your risk of developing cancer.
CPS-II Data Helps Confirm Dangers of Air Pollution

An American Cancer Society study published in spring 2009 shows the importance of protecting the air we breathe from pollution.

The study, published in the *New England Journal of Medicine*, revealed that increasing ozone concentrations led to an increase in deaths from respiratory causes. The group that made the research possible? Cancer Prevention Study-II participants.

Most of us think of ozone as a protective layer in the atmosphere that shields the earth from the harmful radiation of the sun. Yet in the lower part of the atmosphere where we live, ozone is actually a major air pollutant – and is one of the main components of smog, along with harmful gases like those from industrial by-products. Prolonged exposure to ozone over many years can negatively affect the respiratory system, making it tougher to breathe for many people.

The study is a step forward that will help scientists better understand the relationship between ozone and deaths from air pollution – a connection that has long been of interest in the scientific community. The precise nature of this relationship is still uncertain.

For the study, data from approximately 449,000 CPS-II participants was combined with air pollution information from metropolitan areas around the United States. Scientists in the United States and Canada collaborated on the research, including Society epidemiologist Michael Thun, MD, and the late Eugenia Calle, PhD.

American Cancer Society Cancer Prevention Studies: Saving Lives Then And Now

The American Cancer Society has a long history of working to find cures for cancer. Only by better understanding the disease can we discover new and better ways to prevent, detect, and treat cancer – and fulfill our mission of saving lives. That's why volunteers like you who participate in our Cancer Prevention Studies are so important.

Thanks to you, the Society during the past century has helped turn cancer from an almost certain death sentence to a disease that more people now survive. More than 11 million Americans alive today who have survived cancer are proof of the progress we're making together by helping people stay well and get well, by finding cures, and by fighting back against this disease.

**Past:** Begun in 1959, Cancer Prevention Study-I (CPS-I), with more than one million participants, is one of the largest studies of diseases caused by tobacco. Its landmark findings helped confirm tobacco use as a major cause of cancer.

**Present:** Cancer Prevention Study-II (CPS-II) was launched in 1982 to help better understand the causes of cancer.

Results from this study are still being used to increase our knowledge of the role of environmental, lifestyle, and genetic factors in cancer.

- The CPS-II Nutrition group, comprised of 184,000 people, is a subset of the initial CPS-II Baseline group. This is the group we send questionnaires to every two years.
- The CPS-II Lifelink study was formed from the Nutrition group and provided blood samples for the study. There are 39,000 participants in the Lifelink study.
- The CPS-II Buccal Cell study is another subset of the Nutrition group. Approximately 70,000 participants gave cheek cell samples to study how genetics impacts cancer risk.

**Future:** As you know, the Society is currently enrolling participants for its next landmark study, Cancer Prevention Study-3 (CPS-3). This study will help us further examine what affects a person's risk of cancer and how to prevent it, looking particularly at a younger, more diverse population.
Cancer Prevention Study data is giving researchers clues to the causes of pancreatic cancer. A recent study led in part by American Cancer Society epidemiologists found that people with blood types A, B, or AB have about a 40 percent higher risk of developing pancreatic cancer than people with an O blood type.

The link with blood type was discovered as part of the PanScan analysis, a large-scale, high-tech scan of thousands of human genes to identify those linked to pancreatic cancer. One of the genes found to be linked to pancreatic cancer was the gene that determines blood type.

Scientists don’t currently know why this link exists. It may be because blood type can influence how the immune system responds to some infections. Researchers are now stepping up efforts to understand how infections and blood type may interact to increase risk of pancreatic cancer.

To be successful, the PanScan analysis required data from large numbers of people. PanScan was possible only because researchers were able to combine data from the Cancer Prevention Study with that from other studies. The PanScan study is just one example of how the American Cancer Society sometimes joins forces with other researchers in order to more rapidly learn about the causes of cancer.

The study on blood type and pancreatic cancer, published in February 2010 in the journal *Cancer Research*, was conducted by a large collaborative team of researchers from many institutions, including the American Cancer Society, Harvard University, and the National Cancer Institute. Epidemiologists Eric J. Jacobs, PhD, and Alpa V. Patel, PhD, represented the Society on the study.

Denise Chapman considers being the CPS-3 volunteer chairperson at the 2011 American Cancer Society Relay For Life in Taylor, Michigan, a privilege. According to Denise, “Even before our Relay was lucky enough to be chosen as a host site for CPS-3, I was very excited about the program.”

One reason Denise believes in cancer research is because of her own experience with the disease. In December 1999, Denise was diagnosed with non-Hodgkin lymphoma. After several months and six rounds of chemotherapy, her cancer appeared to be in check.

Unfortunately, less than a year later, the cancer returned. This time, Denise endured a more intense round of treatment, which included additional chemotherapy and a bone marrow transplant. After a 27-day hospital stay and support from her husband, Jim, and three daughters, Monica, Jamie, and Jessica, Denise said that “the research that was done on chemotherapy provided my doctor with the options he needed to give me back my life, my hair, my smile, and most of all, my hope.”

Denise’s dedication to Relay For Life and CPS-3 extends much deeper than her own personal story. Her mother, mother-in-law, father-in-law, and best friend all fought and lost their battles with cancer. As a result of her family’s journey, Denise’s daughter Jamie found a job with the American Cancer Society as the staff partner for the Canton Relay For Life, the first CPS-3 site in Michigan.

Denise says, “Jamie is my role model. I will strive to have as successful an event as she and her committee did. I am going for family bragging rights, and now that she recently turned 30, she will be first in line at our event. CPS-3 is so important to me, and with the help of the entire Taylor Relay, we will strive to provide American Cancer Society researchers with as many qualified participants as possible.”

Denise’s hope is that through research conducted with CPS-3, future generations, including her granddaughter Brenna, will never hear the words “you have cancer.”
By now, those of you who enrolled in CPS-3 in 2009 or earlier have received your first follow-up survey. You will receive this type of survey every few years, and your responses will provide American Cancer Society researchers with the tools they need to better understand causes of cancer and how to prevent it. Thank you to those of you who have already returned your completed survey!

If you have not yet completed your questionnaire, please do so as soon as possible. A prompt response helps the Society save money by avoiding repeat mailings. Also, please keep in mind that every response is important. The more information our researchers can collect, the stronger and more precise the findings from CPS-3 will be.

Thank you again for your outstanding commitment to CPS-3 and to a world with less cancer and more birthdays.