The California Teachers Study is off to an exciting start! Over 130,000 active and retired teachers and school staff from all corners of the state and from every level of public education have taken the time to complete the study questionnaire. In addition, we have received many letters, notes, and telephone calls from teachers asking questions, recommending improvements to the questionnaire, providing suggestions for areas of further study, and giving additional information about their families’ medical histories. We are grateful for these comments; not only do they help us to know you better, but they offer a view of teachers’ concerns regarding breast cancer and other diseases.

Breast cancer is the most common cancer in women, yet much remains to be learned about the causes, treatment, and methods for prevention. With large, long-term studies like the California Teachers Study, we can learn a great deal about risk factors for breast cancer and what we can do individually and together as Californians to control the disease. We would like to express our deepest appreciation to each of you; the study would not be possible without the participation of teachers and school administrators like you.

How does a study like this work? You have already completed the most difficult part: making the decision to become involved and completing the lengthy and detailed “baseline” questionnaire. Many questions asked you to recall hard-to-remember events, often from decades ago. Some questions were personal. All questions are related to cancer cause and control issues that have been raised by doctors, cancer patients and concerned citizens. We wish we could have asked many other questions, but we realize that there is a limit to what even the most highly motivated teacher has the time to do.

Many studies of the causes of cancer look back to events in the past, just as you did with the questionnaire you completed. However, the most valuable benefit from this study will come in the future. Every year we will check back with you to let you know what we’re finding, and every two years to inquire about your health. Over the years, we will be able to compare the information which you provided “way back in 1995-1996” with subsequent events, learning more about causes and prevention of breast cancer and other diseases.

So, who are you? Well, first you’re all women (we would like to expand the study to include men in the future). About half of you are over the age of 50, and 49% of you have been teachers or related professionals for over 20 years. Teachers from each of the 58 California counties are participating.

This, of course, is just a first look at what you have reported and we look forward to providing more information in the future. As always, any information we provide will be grouped as statistics, like those above; we will honor your trust and protect your confidentiality. We also remind you that you are not obligated to participate in the future.

Have you moved? SAVE THIS CARD! The California Teachers Study is a long-term research project. To assure that you receive future newsletters containing study updates, please save this postcard and return it to us if your name or address changes from the one printed below. Thank you!

STUDY ID:

New Address:
Name ___________________________________________________________
Street _____________________________________________________________
City________________________State ______Zip _____________
Phone Number ____________________________________________________
LAST FALL when you received your California Teachers Study questionnaire, the cover letter named the scientists who have developed the study. We have devoted many years to the war on cancer and represent a collaboration of cancer research institutions around the state. We would like you to know more about those with whom you have placed your trust.

**Dr. William Wright** directs the California Cancer Registry, the complete, statewide cancer registry system for California. This program is part of the California Department of Health Services and is central to California’s cancer control program. Dr. Wright has worked in the department since 1979, first conducting research on health effects in the workplace and later in monitoring the health of Californians, particularly in regards to diabetes and heart disease. In January, 1996, Dr. Wright assumed his current position as Chief of the Cancer Surveillance Section for California. Among his many responsibilities is providing overall direction for the California Teachers Study.

**Dr. John Young** has devoted his entire career to cancer control, serving for 23 years at the federal government’s National Cancer Institute. He developed and directed the internationally respected SEER cancer registry system which is relied upon to monitor cancer patterns in the United States. From 1989 to 1995, he held the position now held by Dr. Wright He continues to organize cancer control efforts both nationally and internationally.

**Dr. Hoda Anton-Culver** directs the epidemiology division at the University of California, Irvine (UCI) School of Medicine and is the Associate Director of Prevention and Control at the UCI Cancer Center. She is an expert on the genetic causes of cancer, especially of the breast and ovary.

**Dr. Leslie Bernstein** is an associate dean and a senior researcher at the University of Southern California (USC) School of Medicine, with 18 years experience. She is an expert on health effects of oral contraceptives and on the cancer benefits of physical activity.

**Dr. Dennis Deapen** is a researcher at the Norris Comprehensive Cancer Center at the University of Southern California (USC) School of Medicine. Over the past 19 years he has conducted research into the causes of cancer of the breast and prostate and directs cancer registration in Los Angeles County.

**Dr. Eva Glazer** is a researcher in the Cancer Surveillance section of the California Department of Health Services. She studies cancers associated with occupation and industry and actively monitors cancer patterns around the state.

**Dr. Pamela Horn-Ross** is an expert on dietary factors associated with breast cancer and other women’s cancers. She is an Associate Director at the Northern California Cancer Center with 12 years’ experience.

**Dr. Gerri Lee** is the head of the Education and Technical Assistance Unit of the Department of Health Service’s Electric Magnetic Field Program. She specializes in health risks and environmental exposures associated with the generation, distribution and use of electricity.

**Dr. Peggy Reynolds** is the chief of the Environmental Epidemiology and Graphic Information Section in the Department of Health Services Environmental Health Investigations Branch. She develops ways to address citizen’s concerns about potential risks for cancer from environmental factors and she has been involved for 20 years in studies of social, psychological, and environmental factors in cancer occurrence and survival.

**Dr. Ronald Ross** is the Deputy Director of the University of Southern California/Norris Comprehensive Cancer Center, in charge of cause and prevention research. He is an expert on the health effects of hormone replacement therapy and on the hormonal causes of breast and prostate cancer.

**Dr. Dee West** directs the Northern California Cancer Center. His research has focused on the causes, prevention, and genetics of breast and other cancers.
Mammography and Breast Cancer

Understanding how breast cancer develops and how to prevent, detect, and treat this illness is a top priority for the research team of the California Teachers Study. Early detection is key to effective treatment and improved survival from breast cancer. Experts estimate that when a breast tumor is found in the earliest stage, the 5-year survival rate is greater than 95 percent.

Mammography currently is the most effective method of screening for breast cancer in the general population. It is a technique that uses x-rays to create an image of the internal structure of the breast on film. In recent years, advances have refined the procedure to produce better images at very low radiation doses. Today’s mammograms provide better images with greater safety than ever before.

Mammography can detect cancers several years before a woman experiences physical symptoms of the disease, and before the tumor can be felt as a lump. In 1951, only 51 percent of all detected localized tumors were small (i.e., less than 2 cm); by 1988, with the increase in mammography screening, 62 percent of the detected tumors were this small. Small tumors are often less likely to spread and travel through the blood or lymph systems to other places in the body. Therefore, early detection of the tumor while it is still small is important.

The left side of the figure below illustrates that the percentage of women in California who report ever having a mammogram ranges from 65% to 88%. The right side of the figure shows that, for the same age groups, 90% to 97% of California Teachers Study participants report having a mammogram. This is encouraging since studies have shown that mammography has decreased the breast cancer mortality rate among California women by 14 percent during 1985-1994.

Mammography is also used for diagnosis to differentiate cancer from benign tumors. Diagnostic mammography is a valuable tool for investigating symptoms such as lumps, breast pain or swelling, or nipple discharge, and it can guide fine-needle biopsy for tumors that are too small to be felt. Such image-guided biopsies can yield more accurate diagnosis and replace many surgical biopsies. Women should consult with their health care providers to determine the frequency of mammography screening that is best for them.
Most women have heard that the lifetime risk of developing breast cancer is 1-in-9 or 1-in-8. That frightening number is an estimate of the risk of developing breast cancer for women from birth to age 90. However, this statistic is not very meaningful for understanding risks for adult women at different ages, or for women of different races or ethnicities. Another way to think about this problem is to look at the risk of developing breast cancer in the next ten years, for a woman of a specific age group and race or ethnicity. The table below shows the risk of developing breast cancer within the next 10 years for California women. It is based on data from the California Cancer Registry for women diagnosed statewide with breast cancer from 1988 to 1993. For example, a 40-year-old black woman has a 1 in 59 chance of developing breast cancer by age 50.