



RACHEL'S DAUGHTERS,
Searching for the Causes of Breast Cancer
A Light-Saraf-Evans Production
Community Action & Resource Guide

This Community Action and Resource Guide was created for use with the documentary film **RACHEL'S DAUGHTERS: Searching for the Causes of Breast Cancer**, with contributions and assistance from the following:

Charlotte Brody, Citizens Clearinghouse for Hazardous Waste
Pamela Calvert and Judith Helfand, "A Healthy Baby Girl" Community Action Guide
Susan Claymon, Breast Cancer Action
Andrea Martin, The Breast Cancer Fund

RACHEL'S DAUGHTERS: Searching for the Causes of Breast Cancer is a Light-Saraf-Evans Production, directed and edited by Allie Light and Irving Saraf. Major funding for the film was provided by the Teresa and H. John Heinz III Foundation and the Richard and Rhoda Goldman Fund. Additional support was provided by the Breast Cancer Fund, The California Wellness Foundation, The Columbia Foundation, The Fleishhacker Foundation, The Gellert Foundation, the San Francisco chapter of the Older Women's League (OWL), the Shaklee Corporation, and by donations from grassroots supporters.

RACHEL'S DAUGHTERS: Searching for the Causes of Breast Cancer premiered at San Francisco's Castro Theatre on September 11, 1997, and was broadcast on HBO beginning October, 1997.

As of January 1, 1998, **RACHEL'S DAUGHTERS** is available for screenings. To arrange for a screening in your community, call, fax or write:

Light-Saraf Films
264 Arbor Street
San Francisco 94131
Phone and fax: (415) 469-0139

Compiled and edited by Nancy Evans
Design/Production by Wendy Earl, Andrew Ogus, and David Novak
Cover photograph by Rosalind Delligatti



RACHEL'S DAUGHTERS

Searching for the Causes of Breast Cancer

RACHEL'S DAUGHTERS began in response to a tragedy. The 39-year-old daughter of Allie Light and Irving Saraf had been diagnosed with breast cancer. As parents, they wanted to know why. As filmmakers, they set out to investigate the science of breast cancer and the politics of the breast cancer epidemic. Teaming up with medical writer Nancy Evans, the president of Breast Cancer Action, they selected a group of women with breast cancer to serve as investigations/interviewers. Together they traveled the country, talking with scientists studying the causes of breast cancer and with women whose breast cancer suggested an environmental connection.

Twenty-two scientists from leading medical research institutions and the National Cancer Institute proved more than willing to be interviewed and to explain their work in clear, accessible language. Many of the scientists' lives had been touched by breast cancer, either their own cancer or a family member's. Only one researcher declined the request for an interview.

After 2 years of filming, the editing began: trimming and shaping approximately 80 hours of footage into a film of less than 2 hours. Interviews with researchers were interwoven with historical footage, site inspection, original animation, short dramatizations, and visualizations, creating an engaging detective story.

The film is called **RACHEL'S DAUGHTERS** in memory of Rachel Carson, the scientist author of "Silent Spring", the book that launched the American environmental movement. When she warned of the dangers that pesticides and other synthetic chemicals held for all life, especially future generations, her critics asked, "Why is she so concerned about the future; she has no children." We are all Rachel's daughters. Rachel Carson died of breast cancer in 1964, less than 2 years after her book was published.

Filming of **RACHEL'S DAUGHTERS** was marked by pain and loss. Two months after the first meeting of the women investigators, Jenny Mendoza died from metastatic breast cancer just before her 32nd birthday. Gracia Buffleben and Sheila Gullixon, two women who had thymus irradiation as infants died that same year. Toward the end of filming, Erin McKenney, a former flight attendant who may have been exposed to radiation, also died. Since filming began, two of the other investigators have suffered a recurrence.

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A primary goal in making RACHEL'S DAUGHTERS was to shift the focus of public attention from the detection and treatment of breast cancer to the known and suspected causes of the disease and the possible ways to prevent it or at least reduce the risk. The investigators wanted to know why so many women are getting this disease – why the lifetime risk of breast cancer has more than doubled in the last 50 years. Their search uncovered no single answer; instead it suggested many possibilities and raised many more questions. Several things became clear, however.

- First, except for radiation exposure, it may be impossible to pinpoint a single cause of breast cancer. The world is too complex and we are all exposed to a variety of carcinogens every day.
- Second, the so-called “known risk factors” for breast cancer (early menstruation, late menopause, delayed or no childbearing, no breastfeeding) have not been identified as causing breast cancer but are simply events that appear to make the breast more vulnerable to the development of cancer when exposed to carcinogenic agents such as radiation or chemicals, or natural or artificial hormones. Collectively, these vulnerability factors¹ are associated with less than 40 % of all breast cancer, so we must look for other explanations for rising breast cancer rates.
- Third, breast cancer is part of a larger cancer epidemic. The lifetime risk of breast cancer is 1 in 8; the lifetime risk of all cancer is 1 in 3 for women and 1 in 2 for men.
- Fourth, scientific uncertainty is no excuse for inaction on a major public health issue like breast cancer. We cannot wait for “proof” before taking actions to reduce our exposure to carcinogens and harmful chemicals. We must act on the weight of the evidence that contamination of the environment – our air, food, water, and soil – has fueled the cancer epidemic and many other diseases and disorders.

Breast cancer has been called “the canary in the coal mine,”² a sentinel of our global public health crisis. That crisis includes increased incidence of learning disabilities and other birth defects, infertility, and immune system disorders such as arthritis and diabetes. Many scientists believe that the crisis in human health is linked to environmental contamination. To deal with this crisis requires action as the grassroots level, action “from the bottom up.” Change will not happen “from the top down.”

¹ Davis, Devra Lee et al, “Breast Cancer: Rethinking Risk Factors”. In press.

² In the early days of coal mining, miners would take a canary with them underground. If the bird died, it meant oxygen was running low and they needed to surface.



Change begins with education, giving people the information they need to make choices and decisions. RACHEL'S DAUGHTERS can be a powerful educational tool for organizations and communities as they work toward policy changes to protect public health. Breast cancer can become a wedge to open the minds of the public and policy makers to the links between health and environment.

This guide is designed to help you use the film to make the link with other local, regional, and national organizations to create a powerful grassroots movement for cancer prevention. Whether you care most about cancer, birth defects or infertility, wildlife, trees, or global warming, the issue is the same: our health and the health of the planet are inextricably linked and both are suffering.

The Investigators: Eight Women Living with Breast Cancer

Susan Claymon

Twelve years ago, Susan's prognosis was grim: a large tumor and cancer cells in 21 of 24 lymph nodes. She has lived with metastatic breast cancer for 12 years and is undergoing treatment with **HER2/neu**, a monoclonal antibody now in clinical trials. Susan is co-founder and past president of Breast Cancer Action, San Francisco. *"Activism has been an important part of my healing; my work with Breast Cancer Action and other advocacy projects helps keep me going."*

Carla Dalton

Diagnosed with breast cancer 13 years ago, Carla is a licensed acupuncturist and a founding mother of the Women's Cancer Resource Center in Berkeley, California, where she has volunteered as a group leader for 10 years. *"I have just integrated this horrible epidemic into my life. Sometimes my heart feels like a graveyard."*

Nancy Evans

Since her breast cancer diagnosis 6 years ago, Nancy has become a leader in the grassroots breast cancer activist movement, advocating for prevention as well as cure. *"I live on a continuum between rage and grief: rage that so many of us have been wounded by this disease, rage that treatment so often fails, grief at the loss of so many lives, young and old. This is unacceptable and we must work to end this epidemic."*

Jennifer Mendoza

At age 28, Jennifer was diagnosed with breast cancer. For 5 years doctors had told her she had "lumpy breasts" but was too young to have breast cancer. She died of metastatic breast cancer in April 1996, just before her 32nd birthday.

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Rachel Morello-Frosch

Also diagnosed at age 28, Rachel, now 32, has had no recurrence. Recently she received her PhD in environmental health sciences and epidemiology. Since her diagnosis, Rachel has integrated her environmental justice research and activism in a personal way. *"We must push policy makers and researchers to address the disparate impact of breast cancer mortality on women of color."* She serves as Vice President of Breast Cancer Action, San Francisco.

Essie Mormen

"I do this film in honor of my mom." Breast cancer is no stranger to Essie; her mom died of it 14 years ago. Essie remembers growing up on a farm in Mississippi when DDT was considered a boon to humanity. A licensed vocational nurse, now retired, she also remembers holding babies on her lap while they were x-rayed. Sometimes she wore a lead apron; sometimes not. Essie was diagnosed with breast cancer in November, 1995. Long-time experience as a community activist has served her well in speaking out in public meetings – including the 1996 San Francisco Breast Cancer Summit – on the links between breast cancer and environmental factors.

Lori Pascarella

The doctors told her it was nothing; after all, she was only 32. But the pathology report said cancer. Her questions about exposure to electromagnetic fields ended her career as a telephone lineperson. Currently Lori is an active board member of the Lesbian Cancer Project, a nationwide effort to educate and raise awareness in this often forgotten minority. *"The most powerful piece is to share my story and knowledge with other women in hope that they will benefit."*

Pamela Sims-Durall

Only after her breast cancer diagnosis did Pam learn that she and her mother were just two of many family members struck by this disease. And only after working on this film did she learn the variety of exposures that could have contributed to the development of breast cancer in her mother and herself. Since work on the film began, Pam has experienced a recurrence.



The Interviewees: Women Whose Breast Cancer Suggests Environmental Connections

Gracia Buffleben (1945-1996) was born during a time when doctors mistakenly believed that an enlarged thymus could lead to sudden infant death syndrome (SIDS). To prevent this from happening, infants diagnosed with this theoretical disorder had their thymus irradiated. A follow-up study comparing those who had been irradiated with their untreated siblings showed a higher incidence of thyroid and breast cancer in the irradiated group. When she was diagnosed at age 42, Gracia became a breast cancer activist, serving as a liaison between Breast Cancer Action and ACT-UP Golden Gate to educate the breast cancer community about working to change the system.

Sarah Chin was introduced to cancer at age 15 when she was diagnosed with Hodgkin's disease and treated with radiation to the chest. At age 35, she discovered breast cancer and underwent a mastectomy. At age 41, esophageal cancer struck. She is currently undergoing chemotherapy but plans to live to celebrate her mother's 100th birthday in 10 years.

Sheila Gullixon (1946-1996) learned that her thymus had been irradiated during infancy when she was diagnosed at age 23 with bone cancer, necessitating amputation of her left arm. She was 8 months pregnant. Two years later she was diagnosed with cervical cancer; hysterectomy followed. At age 39, she found a lump in her breast that proved malignant. The cancer recurred 2 years after her mastectomy, and for the rest of her life Sheila battled metastatic breast cancer with one chemotherapy after another. Eventually cancer won the battle.

Erin McKenney (1951-1997) was a flight attendant on international charter flights when she was diagnosed with breast cancer at age 41. Two years later the disease had spread to her spine and her lungs. A bone marrow transplant failed to stop the assault on her body. She made no connection between breast cancer and her occupation until late in life when she learned of a Scandinavian study that showed increased incidence of breast cancer among flight attendants.

Dorothy Ann Purley is a Native American from the Pueblo of Laguna in New Mexico. She worked in the Anaconda Jackpile Uranium Mine for 8 years, first as a dump operator controller and later as a truck driver. Today she suffers from lymphoma as well as breast cancer; she believes both these diseases are linked to radiation exposure while working in the mine. When the mine closed, it had scarred both the land and the native peoples. *"Cancer seemed like an epidemic; our younger generations were afflicted by leukemia and tumors."* Dorothy has testified at hearings all over the United States, including the President's Advisory Committee on Human Radiation Experiments in Washington, DC and Santa Fe, New Mexico.

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Lorraine Pace is a breast cancer activist on Long Island and a key figure in the development of the Long Island Breast Cancer Study Project, a multi-million dollar research project investigating the high rates of breast cancer on Long Island. When she and many of her friends were diagnosed with breast cancer they began to map the breast cancer cases in their community, a project that captured the attention of scientists, politicians and the media. Eventually Congress mandated the Long Island Breast Cancer Study Project.

Cathie Ragovin is a psychiatrist in private practice in a Boston suburb. Diagnosed with breast cancer 10 years ago, she is a member of the board of directors of the Massachusetts Breast Cancer Coalition (MBCC). Together with other MBCC board members and scientists from Tufts University, Cathie helped to found and secure funding for the Silent Spring Institute, now investigating the high rates of breast cancer on Cape Cod.

Interviewee: Matriarch of “The Clan of One-Breasted Women”

Terry Tempest Williams is Naturalist-in-Residence at the Utah Museum of Natural History in Salt Lake City. She is also the author of several books about the Southwest, including “Pieces of White Shell: A Journey to Navajoland”, “Coyote’s Canyon”, and “Refuge: An Unnatural History of Family and Place.” In “Refuge”, she describes the “downwinder” experience in Utah and the cancers that struck her mother, both grandmothers, and six aunts long after the 11 years of above-ground atomic testing.

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The Interviewees: Scientists Who Study Possible Causes of Breast Cancer

Ionizing Radiation

Exposure to ionizing radiation causes cancer, including breast cancer. The type of cancer depends on the area most directly exposed and the age at which an individual is exposed. X-rays and fluoroscopy of infants constitutes whole body irradiation. Whatever the radiation source – x-rays, fluoroscopy or other medical radiologic procedures, nuclear fallout, radionuclides in the drinking water – exposure to radiation increases cancer risk. Women who had scoliosis and were monitored as adolescents with repeated x-rays and fluoroscopy have a higher incidence of breast cancer. All Americans were subjected to nuclear fallout from the above-ground atomic testing in Nevada between 1951 and 1958³.

John W. Gofman, PhD, MD, is Professor Emeritus of Molecular and Cell Biology, University of California at Berkeley. An internationally respected authority on the biological effects of radiation, Dr. Gofman evaluated the role of ionizing radiation and chromosome injury in human cancer causation at the request of the Atomic Energy Commission. Dr. Gofman has written several books on radiation and health, the most recent of which is *“Preventing Breast Cancer: The Story of a Major, Proven, Preventable Cause of This Disease.”*

Electromagnetic Fields (EMFs)

All of us are exposed to electromagnetic fields every day. This low-frequency radiation includes microwaves, radar, and power frequency radiation from electric and magnetic fields associated with electricity. Although men rarely get breast cancer, research has shown links between EMF exposure and breast cancer in electrical workers and men who worked on telephone lines. Studies also indicate a link between EMF and brain tumors.

Louis E. Slesin, PhD, is founder, editor and publisher of 'Microwave News', a bimonthly newsletter on the biological effects of non-ionizing electromagnetic radiation, with special emphasis on EMFs and cellular phones. He serves as a member of the National Action Plan on Breast Cancer, Etiology Working Group, and a member of the National Electric and magnetic Field Advisory Committee.

³ Nuclear Test 'HotSpots' Probably All Over Country: Radiation hit hard far from Nevada. Associated Press, July 26, 1997.



Richard G. Stevens, PhD, is an internationally recognized epidemiologist whose research focuses on the interaction of electromagnetic fields (EMF), light-at-night (LAN), and melatonin and how that interaction relates to increased breast cancer risk. Since 1948 he has conducted studies at Pacific Northwest National Laboratory, a facility operated by the Department of Energy.

Pesticides and Other Chemicals

Since World War II, more than 6 million chemicals have been released into our air, food, water, and soil. Fewer than 1000 have been tested for possible harm to human health, including their ability to initiate or promote cancer⁴. Many of these toxic chemicals contain chlorine combined with an organic molecule; they are called organochlorines. Many of these chemicals interfere with or disrupt endocrine (hormone) function; thus they are referred to as endocrine disrupting chemicals (EDCs). Some of the most toxic are dioxins, DDT, chlordane, polyvinyl chloride (PVC) plastics, and chlorofluorocarbons (CFCs). DDT, atrazine, and other organochlorine insecticides have been linked with increases incidence of breast cancer, leukemia in children, and bladder cancer in adults.

Ruth Allen, PhD, is a pesticide expert with the U.S. Environmental Protection Agency. As program Director for the Long Island Breast Cancer Study Project, National Cancer Institute (NCI), her mission is to understand the role of environmental factors in the high incidence of breast cancer among women living on Long Island.

Julia Brody, PhD, is Executive Director of the Silent Spring Institute in Massachusetts, a scientific research organization studying the links between the environment and women's health. She is the principal investigator for the \$3.6 million Cape Cod Breast Cancer and Environmental Study, funded by the Massachusetts Department of Public Health. Her research about health and environment has been published in peer-reviewed journals and presented in hearings of the U.S. Senate, U.S. Department of Energy and elsewhere.

Devra Lee Davis, PhD, is Director of the Program in Health, Environment, and Development at the World Resources Institute. As the former Senior Advisor to the Assistant Secretary of Health, she has advised the Surgeon General and the Deputy Assistant Secretary for Women's Health and the National Action Plan on Breast Cancer on a variety of cancer-related issues. She also serves on the Board of Directors of the Breast Cancer Fund.

⁴ Stellman, J.M. and Stellman, S.D., "Cancer and the Workplace." *CA: A Cancer Journal for Clinicians*, 46(2): 70-92.



Stefanie S. Jeffrey, MD, is Chief of Breast Surgery at Stanford University School of Medicine. She is co-investigator on a project studying associations between breast cancer and environmental chemicals present in breast fat. Her other research focuses on the development of new technologies for the diagnosis and treatment of breast cancer.

Ellen Mahoney, MD, is Clinical Assistant Professor of Surgery, Stanford University School of Medicine and a Fellow in the American College of Surgeons. She has served on numerous panels and committees, including the Congressional Health Advisory Panel and the Scientific Advisory panel of the Ensign & Lewis Foundation for Breast Cancer Research and Education, and she is a co-founder of the Community Breast Health Project. Her private surgical practice includes a focus on breast surgery.

Donald C. Malins, PhD, DSc, is Director of the Molecular Epidemiology Program at the Pacific Northwest Research Foundation in Seattle. His toxicology and biochemistry research includes studies of structural damage to DNA in relation to breast and other cancers. Dr. Malins serves as a member of the Cancer Cube, a special task force of the National Cancer Institute to address the role of estrogen metabolism in the etiology (causes) of breast cancer. He also served as a member of the National Action Plan on Breast Cancer, Etiology Working Group. In 1995 Dr. Malins was elected to the prestigious National Academy of Sciences.

Peter Montague, PhD, is co-founder and director of Environmental Research Foundation (ERF) in Annapolis, Maryland, an organization that offers the general public information about environmental problems and the technologies and policies that might contribute to their solution. He has served as a project administrator of the Hazardous Waste Research Program in the School of Engineering/Applied Science at Princeton University and he is the co-author of two books on toxic heavy metals in the natural environment, and the editor of ERF's weekly newsletter, "Rachel's Environment and Health Weekly" (formerly "Rachel's Hazardous Waste News"). The newsletter provides grassroots environmentalists with technical information about pollution and health.

Marion Moses, MD, is board certified in occupational medicine and is president of the Pesticide Education Center in San Francisco. She has worked extensively with migratory farm workers. Her most recent book is "Designer Poisons: How to Protect Your Health and Home from Toxic Pesticides." Dr. Moses serves on the Endocrine Disruptors Screening and Testing Advisory Committee for the U.S. Environmental Protection Agency.

Susan Sieber-Fabro, PhD, is Deputy Director of the Division of Cancer Epidemiology and Genetics at the National Cancer Institute (NCI), National Institutes of Health. She serves on many advisory boards and chairs several committees, including the NIH Interagency Breast and Gynecologic Cancer Working Group, which coordinates and disseminates research on

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tumors specific to women. Dr. Sieber-Fabro is a member of the National Action Plan on Breast Cancer and serves as co-chair of the Etiology Working Group.

Sandra Steingraber, PhD, is a biologist, a poet and a cancer activist, having been diagnosed with cancer at age 20. Her work brings all three perspectives to bear on the most important health and human rights issue of our time: the growing body of evidence linking cancer to environmental contamination. Her most recent book is "Living Downstream: An Ecologist Looks at Cancer and the Environment". She serves on the National Action Plan on Breast Cancer, Etiology Working Group.

Shelia Hoar Zahm, ScD, is a cancer epidemiologist and Deputy Chief of the Occupational Epidemiology Branch, Division of Cancer Epidemiology and Genetics, of the National Cancer Institute, National Institutes of Health. Dr. Zahm's research has focused on epidemiologic studies of cancer and agriculture, with numerous studies on the relationship between pesticides and non-Hodgkin's lymphoma. Dr. Zahm recently co-chaired an international conference on occupational cancer among women and the President's Cancer panel Conference on Avoidable Causes of Cancer.

Hormones and Lifestyle

For years scientists have recited a list of "known risk factors" for breast cancer, most of which are related to a woman's lifetime exposure to unopposed estrogen. These include early menstruation, late menopause, childbearing after 35 or no childbearing, not breastfeeding, obesity, and advancing age. High-fat diet and alcohol have also been implicated. Although research has shown that women with breast cancer have more of these known risk factors than women without breast cancer, these factors in and of themselves have not been proven to cause breast cancer. Epidemiologist Devra Lee Davis suggests that they should instead be called vulnerability factors, in that they predispose the breast to be more vulnerable to environmental carcinogens.

Despite the apparent estrogen-breast cancer connection, research about the influence of oral contraceptives and hormone replacement therapy (HRT) on breast cancer risk continues to be called "controversial." When HRT was introduced in 1940, the lifetime breast cancer risk was 1 in 20. A decade later, it had jumped to 1 in 15. Oral contraceptives were introduced in 1961. A decade later, the breast cancer risk was 1 in 13, and by 1972 breast cancer had become the leading cause of deaths among American women. Today the lifetime risk of breast cancer is 1 in 8, and Premarin, the leading hormone replacement drug, is the most widely prescribed drug in America.

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Medical prescriptions were not the only source of estrogens, however. Between 1940 and 1980, the use of wartime chemicals by industry and agriculture had increased exponentially, from a few billion pounds per year to 200 billion pounds per year. Many of these instruments of war mimic the effect of estrogen on the body (See the section on Pesticides and other Chemicals).

Louise Annette Brinton, MPH, PhD, is Chief of the Environmental Epidemiology Branch at Nci. Dr. Brinton has received many professional honors for her distinguished contributions to research, including election as a Fellow in both the American College of Epidemiology and the American Epidemiology Society. She had published extensively and serves on the editorial board of *"American Journal of Epidemiology"*, *"Cancer Causes & Control"*, *"Journal of the National Cancer Institute"*, and *"Menopause"*. She is currently project officer for studies on cancer risk in women, including multi-disciplinary investigations of the environmental causes of cancer. Dr. Brinton is a member of the National Action Plan on Breast Cancer, Etiology Working Group.

Graham A. Colditz, MD, DrPH, is Associate Professor of Medicine, Harvard Medical School, and Epidemiologist, Brigham and Women's Hospital, and Project Director of the Nurses' Women Health Study, one of the largest studies of women's health in the world. His research focuses on reproductive factors, including the use of oral contraceptives and hormone replacement therapy, and the risk of breast cancer. Dr. Colditz has lectured and published extensively in the national and international literature related to breast cancer.

Phillip S. Gardiner, PhD, is a behavioral scientist in the Tobacco-Related Disease Research Program, University of California, Berkeley, and former Senior Research Associate at the Northern California Cancer Center where he studied cancer screening behaviors among multi-ethnic underserved women.

Claude L. Hughes, Jr., MD, PhD, is Research Professor at Duke University with a dual appointment in Obstetrics and Gynecology and the Integrated Toxicology Program. He is a diplomate of the Subspecialty Board of Reproductive Endocrinology, American Board of Obstetrics and Gynecology. He has lectured and published extensively on female reproductive health issue for more than two decades, and most recently on his innovative research related to dietary phytoestrogens as a possible breast cancer prevention strategy and the possible interaction between dietary phytoestrogens and exposure to selected industrial chemicals. Dr. Hughes has served as a scientific advisor and consultant to government regulatory agencies, environmental groups, and industry organizations.

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Susan M. Love, MD, is a breast surgeon and Director of the Santa Barbara Breast Cancer Institute. Formerly Director of the Revlon/UCLA Breast Cancer in Los Angeles, the Associate Professor of Clinical Surgery at UCLA, she served as the Revlon Chair in Women's Health. A proponent of innovative approaches to treatment, she has published widely. As a patient advocate, she is best known for "Dr. Susan Love's Breast Book", written with Karen Lindsey, and has recently published "Dr. Susan Love's Hormone Book". Dr. Love is also well known for her work with the National Breast Cancer Coalition, and for her many media appearances to discuss the importance of women having accurate information in order to make choices about treatment.

Ana M. Soto, MD, is Associate Professor at Tufts University School of Medicine, Department of Anatomy and Cellular Biology. Together with Dr. Carlos Sonnenschein, she has been researching the mechanism of action of estrogens on cell proliferation for more than 20 years. Their research on environmental estrogens stems from the accidental finding that plasticware in which human serum was stored leached an estrogen-mimicking chemical. Dr. Soto serves on the National Action Plan on Breast Cancer, Etiology Working Group. She has also been elected to the National Academy of Science.

Genetics

Experts estimate that genetically linked or familial breast cancer accounts for no more than 5 to 10% of all cases. Yet, identifying the genes associated with breast cancer is a primary emphasis in much of breast cancer research and diverts both funds and attention from the search for cancer's environmental roots. Two breast cancer susceptibility genes (BRCA1 and BRCA2) have been identified. Women who carry certain mutations in these genes have few protections, either against the disease or against the losses that can result – loss of employment, health insurance, and perhaps the loss of their breasts. The best that medical science currently can offer such women is prophylactic double mastectomy, and even this drastic action is not guaranteed to prevent breast cancer.

Andrew Futreal, PhD, was a key investigator in the identification of the first breast cancer susceptibility gene, BRCA1, in 1994 during his PhD work at the University of North Carolina- Chapel Hill. After joining the faculty at Duke University Medical Center, he served as co-principal investigator on the identification of the second breast cancer susceptibility gene, BRCA2, in 1995. His work continues to focus on the identification and characterization of genes that predispose to breast cancer. In 1996 he received the U.S. Department of Health and Human Services Secretary's Award for Distinguished Service. Dr. Futreal is an Assistant Professor in the Department of Surgery, the Division of Gynecologic Oncology, and the Department of Genetics at Duke University Medical Center.

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Film Consultants

Bella Abzug, JD, Founder and President, Women's Environment & Development Organization (WEDO)

Graham Colditz, MD, DrPH, Associate Professor of Medicine, Harvard Medical School, Epidemiologist, Brigham & Women's Hospital, and Project Director of the Nurses' Women's Health Study.

Arlyne Draper, Founder and President, Women's Cancer Task Force, San Diego

John Gofman, MD, PhD, Professor Emeritus, University of California, Berkeley

Sadja Greenwood, MD, MPH, Assistant Clinical Professor, Department of Obstetrics, Gynecology & Reproductive Sciences, University of California School of Medicine, San Francisco

Marion Moses, MD, President, Pesticide Education Center, San Francisco

Nanny L. Murrell, RN, MHS, PhD, Assistant Professor, Department of Family Health Care Nursing, School of Nursing, University of California, San Francisco

Elihu Richter, MD, MPH, Head, Unit of Occupational & Environmental Medicine, Hebrew University, Hadassah Medical School, Jerusalem

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WHAT CAN YOU DO TO HELP END THE BREAST CANCER EPIDEMIC

**GET THE FACTS!
GET GOING!
GET INVOLVED!
GET POLITICAL!**

Ending the breast cancer epidemic is a tall order, but all across America grassroots organizations are working to make it happen. More and more of these organizations have begun to make the link between breast cancer and environmental factors: radiation, EMFs, pesticides, and other chemicals. And they're making the link between environmental factors and the rising incidence of other cancers and other diseases and disorders. Most important, they're making the link with other organizations that have common goals. Breast cancer organizations are linking with other cancer organizations, environmental groups, community groups, and concerned scientists; together they are building networks and coalitions to educate, motivate, and activate the public about the need for change. San Francisco's Toxic Links Coalition is just such a group. Their motto: Stop cancer where it starts – in the contamination of our environment by corporations and government, particularly the military.

You can make a difference in this growing grassroots movement. Your time, your talents, and, if possible, your dollars are urgently needed. There are organizations focused on breast cancer, and others focused on radiation or pesticides and other chemicals such as dioxin. There are umbrella organizations such as Greenpeace, WEDO, Commonweal, and the Breast Cancer fund that help bring many groups together on health and environmental issues. All of them are doing great work. Any of them would welcome your support.

GET THE FACTS

Every 3 minutes a woman is diagnosed with breast cancer.
Every 11 minutes a woman dies of breast cancer.

- This year 184,000 women in the United States will be diagnosed with breast cancer, and 44,000 will die from the disease. Breast cancer rates are rising around the world, most rapidly in Japan.
- **Breast cancer is the most common cancer for women in the world.** In the United States, it is the leading cause of death in women ages 35 to 54.

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- **The incidence of breast cancer among American women has more than doubled over the past 30 years.** In 1964 the lifetime risk of breast cancer was 1 in 20. Today it is 1 in 8, and 1 in 7 in some areas.
- **All women are at risk for breast cancer. You're never too young or too old.** The known risk (vulnerability) factors are associated, at most, with only 40% of the cases.
- **Breast cancer is increasing among young women.** Women under age 35 have the lowest survival rate of any age group.
- **African-American women diagnosed with breast cancer are more than twice as likely to die** from the disease as white women.
- **There is no cure for breast cancer.** Of the women diagnosed with breast cancer this year, 37% will die from this disease within 10 years. 44% will be dead in 15 years.
- **There is no sure way to prevent breast cancer.** Although research evidence suggests that a low-fat, high fiber diet, plenty of exercise, and minimizing or eliminating alcohol consumption may reduce the risk of breast cancer, there are no guarantees.
- **Mammography misses 20% of all breast cancers,** and studies show that it may miss as much as 40% of breast cancers in women under the age of 50. By the time mammography can spot a tumor, it has likely been growing for 8-10 years.
- **Most women find their own breast cancers** during breast self-examination or while showering, bathing, or making love. This makes breast self-examination critically important, especially for young women whose breasts may be too dense for mammography to be effective.

GET GOING!

Before you can become a role model and educate others, you need to educate yourself about cancer risk factors.

At Home

- **Don't microwave food in plastic containers, or heat food with plastic wrap,** especially fatty foods. Use ceramic or glass. Some plastics leach endocrine-disrupting chemicals (phthalates) into the food.

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- **Avoid food, water, and other beverages sold in metal cans or containers made with PVC (polyvinyl chloride) plastic.** Look for the recycling code on the bottom of plastic bottles; if it's #3 or V, it's PVC – don't buy it. Many cans are lined with bisphenol-A, and endocrine-disrupting chemical that can leach into canned food and beverages.
- **Discourage babies and children from chewing on plastic** (such as teething rings); choose natural fiber or wood toys for children.
- **Buy or rent a gauss meter or ask your local utility company to measure EMF emissions around your home.** The place where electricity enters your home likely has a high reading, so keep beds and frequently used work areas away from that entry point. Electrical and magnetic fields (EMFs) produce non-ionizing radiation, which has been linked with leukemia in children and breast cancer in adults, both male and female.
- **Keep your distance from electrical appliances** such as television sets, electric clocks, electric blankets, fluorescent lights, and microwave ovens. Limit your use of hair dryers and don't hold the dryer close to your head. Remember that TV sets emit EMFs on all sides so don't put the back of a set next to a wall that has a bed, a crib, a frequently used chair, or work space on the other side.
- **Limit your use of cordless and hand-held cellular phones** to emergencies and brief conversations. Emissions vary from model to model and some are believed to exceed national standards.
- **Eat low on the food chain: make fresh fruits and vegetables (organic if possible) the center of your diet.** If you can, grow some of your own produce or start a community garden – community gardens grow community spirit as well as food. Limit your consumption of animal products (meat, poultry, fish and dairy products); all animal products contain dioxin and many also contain hormones and pesticide residue. Contamination of fresh water fish with mercury, PCBs, chlordane, dioxin, and DDT has reached an all-time high. These toxins have been linked with learning disabilities in the offspring of mothers who ate the fish.

-Practice "produce activism". Get to know your produce manager and ask for more organic produce. Increasing demand for organic fruits and vegetables will bring the prices down.

-Stop using toxic, expensive commercial cleaning products. Switch to planet- and pocketbook- friendly natural products like baking soda, vinegar, soap, lemon juice, and salt. For example, olive oil makes a great furniture polish as well as salad dressing.

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-Switch to “wet cleaning” for clothing labeled “dry clean only”. Talk to your dry cleaner and ask him or her to change to the new “wet cleaning” process. Since the 1930s, dry cleaners have used perchlorethylene (“perc”) to clean wool, silk, and other fine fabric. Perc is a probable carcinogen, linked with bladder cancer and esophageal cancer; drycleaners have twice the rate of both cancers compared with the normal population. Perc is a leading contaminant of our drinking water and has been found in rainwater, rivers, seas, and ground water.

-Don't use pesticides in your home, on your pets, or on your lawn – and get your neighbors to follow suit. The wind and rain can bring their pesticides your way. One way to avoid pesticides: Pour boiling water or vinegar on weeds.

For more information: Greenpeace; Mothers & Others for a Livable Planet; Pesticide Action network; Pesticide Education Center; EMR Alliance.

At Work

-If you work in an office, have your computer checked for EMF and sit at least 26 inches (arm's length) from the screen. Don't stand close to large, multi-function copiers when they are in operation. Fluorescent lights, common in many offices, are another significant source of EMF emissions. Try to position your work station to take advantage of natural light or a non fluorescent desk lamp.

-If your office is next to a high-EMF area, such as a central copying unit, position your work area away from the wall and put bookcases or file cabinets against the wall.

-If you work with chemicals, for example, in farm work or the electronics industry, find out what chemicals you're being exposed to. Ask for the information in the Material Safety Data Sheet (MSDS) which includes health and safety recommendations. Be sure your employer has an injury and illness prevention program; in many states, the law requires it. Wear protective equipment appropriate for the specific chemical (s) you work with. If you experience symptoms of headache, dizziness, drowsiness, tremors, irritation of your skin, eye, nose, or throat, see a doctor trained in occupational medicine. Regular physicians may not recognize the symptoms of work-related injury or illness.

-Wash your hands before eating, and wash your cloths, hair, and body often because chemicals stay on your clothes, on your skin, and in your hair.

For more information: EMR Alliance; Environmental Research Foundation; Pesticide Education Center; Pesticide Action Network.

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At the Doctor's Office

-Avoid unnecessary x-rays of yourself and your family, especially your children. When your doctor orders an x-ray, ask WHY it is necessary. Ask the doctor and the radiologic technician what the radiation dose is. If they don't know, the dose may be unnecessarily high. Radiation exposure is cumulative over a lifetime, even at low doses.

-Ask about the radiation dose for any radiological procedure, including scans and arteriograms. Ask about the risks and whether there is an alternative procedure that does not involve radiation exposure.

-Ask about alternatives to hormone replacement therapy to help you cope with menopausal symptoms. Moderate exercise and a healthy diet (eating low on the food chain) can help you avoid heart disease and osteoporosis.

-If your family has a history of breast cancer and you're thinking about genetic testing, consider what you will do with that information and the implications for you and your children.

For more information: Breast Cancer Action, Committee for Nuclear Responsibility; National Women's Health Network.

The suggested actions are just first steps. You'll find other organizations working on important issues listed in the Resource section of this guide, plus books and newsletters that offer more detailed, in-depth information. "Rachel's Environment and Health Weekly" is a great place to start your environment and health education: It's well-written, carefully documented, and concise, and it covers a broad spectrum of issues, including the politics and economics of environmental health. A 1-year subscription is just \$25 (see Resources). Once you've got the facts...

GET INVOLVED!

-Choose an organization with headquarters or a local chapter near you and get to know the people involved. Ask for a copy of their newsletter and their annual report. If the organization holds public forums, attend one or more and see if that's the group you want to support.

-If you're part of an organization but are not active, maybe you should move on to another group with an agenda you feel passionate about. Whether you have a lot of time to volunteer or just a little, many organizations would be glad for your help. If you're too busy to volunteer, send money. Most nonprofit grassroots organizations are always in need of financial support.

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GET POLITICAL!

-Speak up and speak out on the issues; demand pollution prevention. Whether it's breast cancer, prostate cancer, birth defects or asthma, pesticides in our parks and dioxin in our food, you can help people make the link between health and environment.

-Support campaign finance reform and help get special interest money out of politics. Until we have publicly financed election campaigns, corporate contributions and other special interests will continue to control Congress and the White House.

-Register and VOTE! Unless you vote, you have no choice in how your tax dollars are spent. Even if you feel ignored by both major political parties and their candidates, it's important to vote on all local, state, and national legislative issues.

A CASE HISTORY IN COLLABORATION: HEALTH CARE WITHOUT HARM

First do no harm. Every day, hospitals across America violate that classic principle of health care by incinerating medical waste. That incineration releases dioxin, mercury, and other toxins into the air, contaminating our food, water, and soil.

Dioxin is the name given to a group of extremely potent toxic substances that come from the burning of chlorine in the medical waste stream is polyvinyl chloride (PVC) plastic. PVCs are among the most widely used materials in IV bags and tubing, blood bags, and other health care disposables. When PVCs go up in smoke, dioxin lands on our dinner table, especially in meat, fish, milk and other dairy products. When we eat these foods, we ingest the dioxin and mercury, which is then stored in our body fat.

Dioxin and mercury have been linked to endometriosis, learning disabilities, birth defects, infertility, nervous system disorders, and cancer. Growing evidence suggests that both toxins are already present in the bodies of most Americans at or near dangerous levels.

In September, 1996, representatives of 28 organizations met together at Commonweal in Bolinas, California to plan for a campaign for eliminating the pollution in health care practices without compromising safety or care. That was the beginning of Health Care Without Harm, an international collaboration of doctors, nurses, scientists and members of labor unions, health-impacted groups, environmental justice organizations, religious institutions, and environmental organizations working to promote environmentally responsible health care. As of August, 1997, 53

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organizations have joined Health Care Without Harm, including many breast cancer advocacy groups.

Choices in medical products and methods of waste disposal affect the environment as well as a hospital's "bottom line". The types of medical products used at a hospital or clinic influence whether they can be recycled as well as the hazards they will produce when thrown away. This means replacing disposables with reusables whenever possible, reducing the use of PVC plastics by choosing products made from nonchlorinated plastics, and separating infectious waste from noninfectious waste.

European hospitals are moving to environmentally and economically sound methods of medical waste disposal. Some are dioxin and mercury free. United States hospitals and other health care facilities need to follow suit, and Health Care Without Harm is helping to lead that effort.

In one short year, Health Care Without Harm had attained the following victories:

- Adoption of a "Dioxin and PVC Resolution" at a meeting of the American Public Health Association
- Release of the national report, "First Do No Harm," with press events in 35 states and Washington, DC
- Coordination of efforts to strengthen the EPA's rules on medical waste incinerators
- Assisting in the South Bronx Clean Air Coalition with their successful campaign to close the Bronx-Lebanon incinerator
- Providing information, training, and support to communities working to implement the goals of Health Care Without Harm

You can learn more about how to become part of Health Care Without Harm by contacting the address below. Together we can stop this environmental source of harm to our health and make our hospitals clinics, and nursing homes models of environmental responsibility.

CCHW Center for Health, Environment, and Justice
P.O. Box 6806
Falls Church, VA 22040
Phone (703) 237-2249
Fax (703) 237-8389
e-mail: CCHW@essential.org
Website: <http://www.essential.org/cchw>

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Partners in Health Care Without Harm

Action for Women's Health, Albuquerque, NM
AFL-CIO
American Nurses Association
Breast Cancer Action, San Francisco, CA
The Breast Cancer Fund, San Francisco, CA
California Communities Against Toxics, Rosamond, CA
California, Nevada Board of Church & Society, United Methodist Church
Center for the Biology of Natural Systems, Flushing, NY
CGH Environmental Coalition, Albany, NY
Citizens for a Better Environment, Madison, WI
CCHW Center for Health, Environment and Justice, Falls Church, VA
Chemical Impact Project, Kentfield, OH
Clean North, Sault Ste Marie, ON, Canada
Committee of Interns and Residents, New York, NY
Commonweal, Bolinas, CA
EarthSave, Santa Cruz, CA
Ecology Center, Ann Arbor, MI
Endometriosis Association, Milwaukee, WI
Environmental Working Group, Washington, DC
Environmental Stewardship Concepts, Richmond, VA
Essential Action, Washington, DC
Farm-Verified Organic, Windsor, ND
Government Purchasing Project, Washington, DC
GreenPeace USA
Human Action Community Organization, Harvey, IL
Indigenous Environmental Network, Hackensack, MN
Institute for Agriculture and Trade Policy, Minneapolis, MN
Jenifer Altman Foundation, Bolinas, CA
Kirschenmann Family Farms, Inc, Windsor, ND
Learning Alliance, New York, NY
Learning Disabilities Association, Pittsburgh, PA
Massachusetts Breast Cancer Coalition, Boston, MA
Minnesota Center for Environmental Advocacy, St. Paul, MN
Mt. Sinai School of Medicine, New York, NY
National Environmental Law Center, Boston, MA, and Davis, CA
National Women's Health Network, Washington, DC
North Carolina Breast Cancer Coalition, Raleigh, NC
North Carolina Waste Awareness and Reduction Network, Durham, NC
Oil, Chemical and Atomic Workers International Union, Lakewood, CO
Pollution Probe, Toronto, ON, Canada
Physicians for Social Responsibility
Save Our County, East Liverpool, OH
Science and Environmental Health Network, Windsor, ND
South Bronx Clean Air Coalition, Bronx, NY
Toxics Action Center, Boston, MA
United Citizens and Neighbors, Urbana, IL

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Washington Toxics Coalition, Seattle, WA
WEDO, Women's Environment & Development Organization, New York, NY
Women's Cancer Resource Center, Minneapolis, MN
Women's Cancer Resource Center, Berkeley, CA
Work on Waste, Canton, NY
1199, The National Health and Human Services Employee Union, New York, NY

RESOURCES

ORGANIZATIONS

Breast Cancer Action
55 New Montgomery, Suite 323, San Francisco, CA 94105
(415) 243-9301, fax: (415) 243-3996, e-mail: bcaction@hooked.net
<http://www.bcaction.org>

Breast Cancer Action is a grassroots organization founded and led by women with breast cancer. Their mission is to serve as a catalyst for the prevention and cure of breast cancer. Through education and advocacy, they are working to make eradication of breast cancer a national priority. They promote research into the causes, prevention, treatment, and cure of breast cancer, and work to empower women and men to participate fully in decisions relating to this disease.

The Breast Cancer Fund
282 Second Street, Second Floor, San Francisco, CA 94105-3130
(415) 543-2979, fax: (415) 543-2975, e-mail: tbcfund@aol.com
<http://www.breastcancerfund.org>

The Breast Cancer Fund was founded in 1992 by Andrea Martin to address the urgent need for widespread public response to the breast cancer epidemic and to change the status quo on our limited knowledge about the disease. The mission of The Fund is to eliminate deaths from breast cancer in our lifetimes and to take care of women in the meantime. In the past 5 years, the Fund has raised more than \$4 millions to increase awareness and has funded more than 100 cutting-edge projects in research, education, patient support, and advocacy. The Fund provided critical seed funding for "Rachel's Daughters", and for the First World Conference on Breast Cancer held in July, 1997 in Kingston, Ontario, Canada.

Children's Health Environmental Coalition (CHEC)
P.O. Bos 846, Malibu, CA 90265
(310) 573-9608, fax: (310) 573-9688, e-mail: checnet.org
<http://www.checnet.org>

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CHEC is a national nonpartisan grassroots organization dedicated to protecting our children from the threat of environmental toxins. CHEC works to link policy makers, the scientific community, parents, and grassroots groups through an information clearinghouse, an interactive website, meetings, symposia, and the promotion of legislation.

Citizens Clearinghouse For Hazardous Waste (CCHW)

P.O. Box 6806, Falls Church, VA 22040

(703) 237-CCHW; e-mail: cchw@essential.org

CCHW has worked with more than 8,000 community-based groups nationwide on toxic hazards, helping communities to understand, often for the first time, why their families are sick, or what type of cleanup is needed. CCHW provides organizing assistance and leadership training, and publishes "Everyone's Backyard", a quarterly magazine that features news on what's happening in the grassroots movement for environmental justice; and "Environmental Health Monthly", a journal reprinting medical and scientific articles on health and chemical exposures. CCHW is coordinating the Health Care Without Harm campaign, whose goal is to transform the health care industry so it is no longer a source of environmental harm.

Committee for Nuclear Responsibility

P.O. Box 421993, San Francisco, CA 94142

www.ratical.org/radiation/CNR

The Committee for Nuclear Responsibility is a nonprofit educational organization founded by Dr. John W. Gofman in 1971. Dr. Gofman is professor emeritus of molecular and Cell Biology at the University of California, Berkeley, and author of several books on health effects of ionizing radiation, including "Preventing Breast Cancer: The Story of a Major, proven, Preventable Cause of This Disease", 2nd edition, published in 1996.

Commonweal

P.O. Box 316, Bolinas, CA 94924

(415) 868-0970, fax: (415) 868-2230, e-mail: commonweal@aol.com

www.commonweal.org

Founded in 1976, Commonweal is a nonprofit health and environmental research institute located on the California coast, one hour north of San Francisco. Commonweal has three major areas of program interest: helping at-risk children and young people and training professionals who work with them; helping people with cancer and training professionals who work with them; helping people with cancer and training professionals who work with people with life-threatening illnesses, and supporting the evolution of global citizen awareness of the prospects for a socially just and ecologically sustainable future. In these areas, they initiate or collaborate in

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service, research, demonstration, policy, and educational projects. Health Care Without Harm is one of their most recent initiatives.

DES Action USA

1615 Broadway #510, Oakland CA 94612; (510) 465-4011 or (800) DES-9288;
desact@well.com; <http://www.desaction.org>

DES Action is a national non-profit organization representing an estimated 10 million mothers and children exposed to DES. The organization provides education and support to those exposed to DES and educate medical professionals so they can provide knowledgeable services to DES exposed people. In the U.S., DES Action volunteers lead 24 affiliate groups nationwide-both state affiliates, and the DES Sons Network and the DES Third Generation Network. They are politically active in garnering support and funds for DES research. There are also DES action affiliates in Britain, Canada, throughout Europe, and Australia.

The EMR Alliance

Radio City Station, P.O. Box 1916, New York, NY 10101-1916
(212) 554-4073, fax: (212) 977-5541, e-mail: emrall@aol.com
<http://www2.cruzio.com/~rbedard/emrall.html>

The EMR Alliance is an international coalition of more than 400 grassroots organizations in 25 countries whose primary concern is the health and environmental implications of exposure to electromagnetic (EM), microwave (MW) and radio frequency (RF) radiation. They believed that EM/MW/RF radiation constitutes a significant threat to public health and that EM/MW/RF radiation has played a role in today's breast cancer epidemic. They publish a quarterly journal, "Network News", to alert readers about this vital health and environmental issue.

Environmental Research Foundation

PO Box 5036, Annapolis MD 21403-7036; (410) 263-1584 tel/ (410) 263-8944;
erf@igc.apc.org

ERF publishes "Rachel's Environment and Health Weekly" a newsletter that covers a wide range of issues for the public and activists concerned with toxic exposure and environmental justice. ERF can also provide information and fact packs for communities and activists on a wide variety of environmental and health issues.

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GreenPeace

1436 U Street NW, Washington DC 20009; (202) 319-2433 tel./ (202) 462-4507
fax www.greenpeace.org

GreenPeace is an international environmental organization committed to creating a green and peaceful planet using non-violent direct action to confront polluters. GreenPeace works to protect the world's oceans and forests and to eliminate the health and environmental threats posed by fossil fuels, nuclear power, nuclear weapons, and toxic pollution. GreenPeace also works to prevent disease and make the world a safer place for our children by eliminating dioxin and other toxic chemicals that threaten public health.

Mothers and Others for a Livable Planet

40 West 20th Street, New York NY 10011-4211; (212) 242-0010 or (888) ECO-INFO tel/ (212) 242-0545 fax; mothers@igc.apc.org; greenguide@igc.apc.org; <http://www.mothers.org/mothers>

Mothers and Others is a national consumer education and advocacy organization working to promote consumer choices which are safe and ecologically sustainable for current and future generations. They work to educate consumers regarding the dangers of pesticides on food, and to encourage sustainable choices in the marketplace. Their newsletter, "Green Guide", is published 15 times each year.

National Religious Partnership for the Environment

1047 Amsterdam Avenue, New York NY 10025; (212) 316-7441;
<http://www.nrpe.org>

The National Religious Partnership for the Environment is a federation of major American faith communities-the U.S. Catholic Conference, the Coalition on the Environment and Jewish Life, the National Council of Churches of Christ, and the Evangelical Environmental Network-working to integrate commitment to global sustainability and environmental justice permanently into religious life. They provide information for organizing religious groups on environmental issues and for using resources unique to the religious community to encourage initiatives rising above self-interest toward the common good.

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National Women's Health Network
514 10th Street NW #400, Washington DC 20004; (202) 347-1140 tel/ (202) 347-1168 fax/ (202) 628-7814 Clearinghouse
www.womenshealthnetwork.org

The National Women's Health Network is an advocacy organization giving women a greater voice in the health care system in the United States. The Network educates people about health care to make them better informed health consumers, and monitors health-related legislation to protect women's health rights. The Clearinghouse staff provides information over the phone and through the mail.

Pesticide Action Network (PAN) North America
116 New Montgomery, #810, San Francisco, CA 94105
(415) 541-9140, fax: (415) 541-9253 panna@panna.org ;
<http://www.panna.org/panna>

PAN is an international coalition of citizen's groups who oppose the misuse of pesticides and support reliance on safe, ecologically sound alternatives. Established in 1982, PAN currently links over 400 organizations in 60 countries, coordinated by five regional centers. PAN North America publishes a quarterly newsletter, "Global Pesticide Campaigner", with monthly updates, PANUPS.

Pesticide Education Center (PEC)
P.O. Box 420870, San Francisco, CA 94142-0870
(415) 391-8511, fax: (415) 391-9159, e-mail: pec@igc.apc.org
www.pesticides.org

The PEC is a nonprofit educational organization founded by Marion Moses, MD, and working towards a safe environment for workers and consumers. They develop visual and curricular materials and provide services targeted to the needs of average citizens and workers exposed to pesticides at work or in their homes or environment. The PEC can provide information about specific pesticides and recommend approaches to the problem. In some cases, the PEC works directly with affected communities on specific problems.

Physicians for Social Responsibility (PSR)
1101 14th Street NW #700, Washington DC 20005; (202) 898-0151 tel/ (202) 898-0172 fax
www.psr.org

With more than 20,000 U.S. members and over 90 local chapters, PSR works to protect people from environmental health hazards and to shift government spending priorities away from wasteful military expenditures and toward investments in public health and the environment. PSR's priorities include educating medical

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professionals about environmental health hazards, and advocating for environmental clean-up laws that mandate public health protection, a national program to assess the health hazards of abandoned hazardous-waste sites, and policies forcing the U.S. military to comply with federal environmental laws and regulations.

Public Health Institute

835 Broadway #2014, New York, NY 10003; (212) 674-3322 tel/ (212) 353-1203 fax

www.phi.org

The Public Health Institute addresses the growing jobs-versus-environment conflict by building connections between unions and various elements of the environmental and public health communities. They work to demonstrate that the same groups who profit from weak toxics regulation also profit from the destruction of stable jobs. By bringing both concerns to the table in this context, the Public Health Institute facilitates the development of fair approaches to phasing out the use of toxics, and increases the strength of both movements by forging alliances between them.

Public Interest Research Group (US-PIRG)

218 D Street SE, Washington DC 20003; (202) 546-9707 tel/ (202) 546-2461 fax

www.pirg.org

US-PIRG is a non-profit, non-partisan organization dedicated to serving as a watchdog for the nation's citizens and the environment. They work on a wide range of issues—from consumer safety to alternative energy sources—all with the central goal of protecting the public interest. US-PIRG combines the expertise of professionals with the power of citizens to fight wherever their campaigns take them: from Congress to the courts, to corporate board rooms, and to government agencies and the news media.

Silent Spring Institute

29 Crafts Street, Newton, MA 02158
(617) 332-4288, fax: (617) 332-4284

www.silentspring.org

Silent Spring Institute is a partnership of scientists and citizens concerned about potential environmental links to breast cancer. It is named in recognition of Rachel Carson, author of "Silent Spring", whose pioneering work linked the use of pesticides to adverse effects on wildlife. By focusing on the environment, they seek to identify preventable causes of disease.

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Women's Cancer Resource Center
3023 Shattuck, Berkeley, CA 94705
(510) 548-9272, TTY line for the deaf: (510) 548-9288, fax: (510) 548-2155; e-mail: wrcrc@signwave.com
www.wcrc.org

The Women's Cancer Resource Center offers information, referral, support, and advocacy to meet the needs of all women with cancer, particularly the poor, the elderly, women of color, and lesbians. A staff of trained volunteers, many of them women with cancer, provides information on specific types of cancer, mainstream and alternative treatments, and support groups. They publish a quarterly newsletter, hold public forums, and work in coalition with other organizations to increase public awareness and involvement in efforts to prevent and cure cancer.

Women's Community Cancer Project (WCCP)
C/o The Women's Center, 46 Pleasant Street, Cambridge, MA 02139; (617) 354-9888

One of the first grassroots women's cancer organizations in the United States to focus on environmental links to cancer, WCCP was created to make changes in the current social, medical, and political approaches to cancer, particularly as they affect women. As feminists, they are committed to challenging the various forms of discrimination that exist in many mainstream and alternative cancer establishments – sexism, racism, ableism, homophobia, ageism, and classism. They publish fact sheets on various cancer issues as well as a newsletter.

PUBLICATIONS

Breast Cancer

Bruning, Nancy. "Coping With Chemotherapy", 2nd edition. (Ballantine Books, 1993)

Lerner, Michael. "Choices in Healing". (MIT Press, 1996)

Love, Susan. "Dr. Susan Love's Breast Book", 2nd edition. (Addison-Wesley, 1995)

Moss, Ralph. "Cancer Therapy: The Independent Consumer's Guide to Non-Toxic Treatments and Prevention". (Great Traditions, 1995)

Rinzler, Carol. "Estrogen and Breast Cancer: A Warning to Women". (Hunter House, 1996).

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Cancer Politics

Batt, Sharon. "Patient No More: The Politics of Breast Cancer." (Gynergy Press, Montreal, Canada, 1994)

Brady, Judy. "One in 3: Women With Cancer Confront an Epidemic." (Cleis Press, Pittsburg, PA, 1991)

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“A Healthy Baby Girl.” A documentary video by Judith Helfand about the endocrine disrupting chemical diethylstilbestrol (DES) and the cancers it caused in young women who had been exposed in utero (48. min, color), with a Community Action Guide. Available from Women Make Movies, 462 Broadway, #500, New York, NY 10013. (212) 925-0606.

“Who’s Counting? Marilyn Waring on Sex, Lies, and Global Economics.” A documentary video about the need for quality of life indicators rather than the GDP (Gross Domestic Product) as a basis for setting public policy at the national and international level. These indicators measure the state of communities and the environment, not just how much money is changing hands. Available from the “Who’s Counting” Project, c/o Lebensold, 7575 Sunkist Drive, Oakland, CA 94605. Email: loisjones@igc.org .

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RACHEL'S DAUGHTERS

World Premiere

RACHEL'S DAUGHTERS premiered at San Francisco's Castro Theater on September 11, 1997, hosted by The Breast Cancer Fund in alliance with other breast cancer organizations and environmental and community groups. This event was made possible by the generous support of the following organizations and individuals:

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“Public and private interests should act to prevent harm before it occurs. This is known as the precautionary principle, and it dictates that indication of harm, rather than proof of harm, should be the trigger for action – especially if delay may cause irreparable damage. At what point does preliminary evidence of harm become definitive evidence of harm? When someone says ‘We were not aware of the dangers of these chemicals back then,’ whom do they mean by we?”

Sandra Steingraber, “Living Downstream: An Ecologist Looks at Cancer and the Environment”, 1997.

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