There are now more breast cancers diagnosed in the U.S. each year (181,000) than any other cancer, and all but 1000 of these occur in the female half of the population. There are a few other cancers that occur almost as often (lung: 168,000; colon and rectum: 155,000) but these other cancers are spread among the entire population, both men and women.[1] Breast cancer kills more than 46,000 American women each year.

The incidence (occurrence) of female breast cancer in the U.S. is steadily increasing: according to the National Cancer Institute, between 1973 and 1989, among women of all ages, breast cancer incidence rose at the rate of 1.7% per year (2.1% per year among women over the age of 50).[2] To put it most starkly, in 1960 a woman's chance of getting breast cancer in the U.S. was one in 20; today it is one in 9.

The search for the causes of breast cancer has taken many turns. There seems to be little doubt that something in the environment contributes importantly to the disease because in high-incidence countries, such as the U.S. and Germany, the death rate per 100,000 women is 4 times as high as it is in low-incidence countries, such as Japan.[3] Furthermore, when Japanese women migrate to the U.S., within a generation their breast cancer rates begin to approach the U.S. averages.

Several factors have been linked to breast cancer: age at which a woman's period begins (later is safer); age at which menopause occurs (earlier is safer); age at birth of first child (earlier is safer); diet (less fat and more fiber are safer); alcohol intake (less is safer); and exercise (more is safer). All of these factors have a common thread: they all affect the estrogen levels in a woman's blood stream. However, these known “risk factors” still only account for 30% of breast cancers; some 70% remains unexplained.

In the 1980s, researchers in Israel observed that the incidence of breast cancer among Israeli women decreased noticeably when chlorinated pesticides were reduced substantially in Israeli milk.[4]

Devra Lee Davis and others have formally proposed the hypothesis that estrogen-mimicking chemicals in the environment, including pesticides and industrial wastes, may explain the rise in breast cancer that has occurred in industrialized countries during the past 30 years.[5] Recent U.S. studies of DDT in blood and breast tissues of women who developed breast cancer have reached contradictory conclusions about the relationship of DDT to breast cancer: one found a statistically significant increase in cancer among women with elevated levels of DDT (or its by-product, DDE) in their breasts.[6] The more recent study found slightly increased breast cancer rates among black and white women with elevated DDT and DDE in their blood, but an opposite effect among Asian women; taking all 3 groups together, the relationship was not strong enough to achieve “statistical significance.”[7]

Most recently, researchers with the New York State Department of Health have found that women on Long Island have a greater chance of getting breast cancer if they grew up within a mile of a chemical plant than if they lived further away.[8]

Many environmental factors may contribute to breast cancer. One well-established factor that seems to have been missed by the news media and even by some scientists is radiation. For decades, women have been subjected to unnecessary and unnecessarily high radiation exposures by the medical community. (Many members of the same medical community are now studying the relationship of chemicals to breast cancer; perhaps this helps explain why radiation is often not discussed.)

Dr. John Gofman has recently been examining medical literature going back to the 1930s and 1940s. He has found that many physicians were fixated on a “problem” (later discovered not to be a problem) called “thymic enlargement.”[9] The thymus is a gland in the upper chest and lower neck. In the ’30s and ’40s, doctors imagined that “thymic enlargement” was a common and potentially fatal problem among American children. They prescribed frequent large doses of x-rays and fluoroscopic examinations, both for diagnosis and for therapy. (Fluoroscopy is to x-rays what motion pictures are to snapshots. Fluoroscopy gives the patient a much larger dose of radiation than an x-ray.) Many doctors regularly gave x-ray treatments to newborns as a “prophylactic” (preventive) measure—to guard against the development of thymic enlargement. Many parents came to believe that their children were not getting the best available medical care if they were not given x-ray treatments. In a 1948 medical article, two physicians wrote, “The obstetrician or pediatrician should accede to the wishes of the parents who want neonatal [newborn] roentgenograms [x-rays] of their children. It might even be wise to administer therapeutic doses over the thymus. Whatever assurance is gained by this apparently harmless and perhaps beneficial procedure will aid in alleviating any anxiety which occasionally becomes a thymus phobia.”

In a 1970 medical article, Dr. Hanson Blatz looked back on his professional years, noting, “Those of you who have been in the field a long time know it was once the practice of practitioners to fluoroscope babies and young children every month and when they had the annual checkup. When we questioned this practice, physicians would say, ‘Well, the parents expect it. They think if I don’t fluoroscope the patients, they are not getting a complete examination.’”[10] Gofman notes that Blatz must be describing habits of the 1940s and 1950s.

Gofman points out that, between 1920 and 1960, unnecessary and/or excessive x-rays and fluoroscopic exposures of the breasts were received by girls and women in connection with scoliosis (spinal curvature), mammograms, screening for tuberculosis, diagnosis and treatment of enlarged thymus, “therapy” for non-malignant breast conditions, monitoring of tuberculosis treatments, exposure of adults during exams of children, and non-medical uses (such as fluoroscopes in shoe stores).

What should a reasonable and prudent person conclude from all this? Is radiation important in causing breast cancer? Without a doubt. Is DDT? Probably yes. Are other chlorinated compounds besides DDT? Probably yes. Does anyone know for sure about harmful effects of these chemicals? No.[11]

What should we do to protect ourselves and our children during the decades that it will take for scientists to learn some of the answers? Adopt the precautionary principle. Avoid exposing yourself to exotic chemicals and technologies. Eat lots of fruits and vegetables, especially the dark greens and dark yellows. Prevent pollution: phase out chlorine and stop adding to the world’s burden of radiation-producing materials derived from nuclear power and nuclear weapons. Trust your own common sense and don’t leave important decisions exclusively in the hands of the “experts.”

--Peter Montague

[1] These are the National Cancer Institute’s 1992 estimates of cancer incidence. See Barry A. Miller and others, editors, CANCER STATISTICS REVIEW 1973-1989 [National Institutes of Health Publication No. 92- 2789], pgs. IV.[1], XV.1, and VI.1. [2] Same publication as in note 1, Table IV-1, pg. IV.[5].


IMPORTANT CONFERENCE JUNE 15-19 IN WISCONSIN

The Indigenous Environmental Network (IEN) is holding its fifth annual Protecting Mother Earth Conference June 15-19 near Mole Lake, Wisconsin. The conference is being hosted by the Mole Lake Sokaogon Chippewa community in conjunction with the Midwest Treaty Network of Madison, Wisconsin. IEN is a U.S., Alaskan, and Canadian-based grass-roots organization. The theme of this year's conference is "Environmental Genocide." Some 1500 native and non-native people and groups will come together at Mole Lake to discuss issues and develop strategies to stop environmental injustices within and near indigenous lands, such as deforestation, toxic and nuclear waste dumping, radiation exposures, and contamination of air, land, and water. Non-indigenous people of good will are welcome at the gathering. For further information, contact conference coordinator Emily Iron Cloud Koenan at (715) 682-4554; fax: (715) 682-9112.

PROTESTING AN ENVIRONMENTAL JUSTICE CONFERENCE

Activists will gather June 8, 1994, at 8:30 a.m. at the headquarters of WMX Technologies, Inc. (formerly Waste Management, Inc.), 720 Butterfield Rd., Oak Brook, Illinois to protest a symposium WMX is sponsoring called "Environmental Justice: The Search for Balance." The welcoming speaker on the topic of "Environmental Justice" will be Dean Buntrock, chairman and CEO of WMX. According to Brenda Kenealy of WMX Technologies [(718) 572-8934] the confirmed keynote speaker is the Reverend Ben Chavis, executive director of the National Association for the Advancement of Colored People (NAACP). No one at NAACP headquarters could confirm Mr. Chavis's participation for us.

For further information, phone Charlie Cray at Greenpeace Chicago: (312) 563-6060, or Calvin Mitchell of Citizens Clearinghouse for Hazardous Waste's midwest office: (317) 920-1051.

Descriptor terms: native people; conferences; breast cancer; lung cancer; colon cancer; rectal cancer; morbidity statistics; japan; estrogen; israel; pesticides; ddt; dde; long island, ny; studies; radiation; john gofman; thymus; x-rays; fluoroscopy; wmx; environmental justice; naacp; ben chavis;