for an association between the body burden of DDE and breast cancer risk in a population of primarily Caucasian women. For women with the highest body burdens of DDE, the risk of breast cancer was found to be four times higher than for those with the lowest burdens. In the second study (2) by Nancy Krieger and her colleagues at the Kaiser Foundation Research Institute, no association was found between DDT and breast cancer when women of all races were examined together. However, a positive association (although not statistically significant) was observed between DDT and breast cancer risk in Caucasian and African-American women. Among Asian women there was no evidence of an association.

There are several possible mechanisms by which DDT may increase risk of breast cancer. Hormonal modulation (estrogenicity and antiestrogenicity) is only one possibility. Another is induction of cytochrome P450 enzymes. These mechanisms may act independently or in concert with one another. Moreover, whatever the mechanisms of action, the carcinogenic potency of DDT and its metabolites may be enhanced by the persistence of these compounds in the human body.

To determine whether the apparent association between DDT and breast cancer risk is real, further epidemiologic investigations as well as complementary mechanistic studies must be carried out. The ultimate hope is that this research may identify a preventable environmental cause of breast cancer in women.

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Genetic Testing and Insurance Costs

In his letter about genetic testing and the costs of insurance (9 Sept., p. 1509), J. Alexander Lowden argues that "If . . . only the applicant [can] know his or her risk and may legally conceal it from the insurer, then insurance will become too expensive for all but those who know they will succomb at an early age." The argument is specious. The cost of insuring individuals who have genetic diseases has been included in insurance costs based on actuarial tables when there was no genetic testing, and the deaths due to inherited disease were part of the age-distributed probability of death due to randomly experienced causes. The insurance companies did not go broke during that period, as Lowden fears could happen in the future.

If one of the insured in that distribution knows that he or she will die of a certain disease, but the insurance company doesn't, little will have been changed for the insurance company. Lowden might fear that individuals who know they will die of a certain disease, perhaps prematurely, will stock up on insurance to better provide for their heirs. However, the levels of insurance individuals buy are dictated by affordability.

Even if the relatively small fraction of the population with heritable diseases were to double the amount of life insurance they buy, there would still be a random element to the payout periods. The cause of death might be predictable, but the age of death is not, within broad limits. By excluding people who have been diagnosed as having a genetic disease, the insurance companies would shift the mean age of death in their actuarial distributions to a higher age. This will defer benefit payments and help short-term profits. Long-term profits should not be affected significantly, as most of "the rest of us [with] perfect genes" will either collect their annuities or die while insured.

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Children's Vaccine Initiative

The special *Science* issue "Frontiers in medicine: vaccines" (2 Sept. 1994) is an excellent and comprehensive report focusing on the high cost-effectiveness of vaccines and the need for new initiatives to bring their benefits to the children who need them most.

The News reports emphasize the need for intensified efforts to bring new research ideas to fruition in the form of vaccines against the most important diseases of the developing world, ensuring all the while that these vaccines will not be priced so high as to be unreachable for most children.

As Ann Gibbons points out (News, 2 Sept., p. 1376), the Children's Vaccine Initiative (CVI) has been slow to gain momentum. The recent reorganization in the World Health Organization (WHO) to centralize vaccine activities in the Global Programme for Vaccines and Immunization will now provide the strong leadership necessary to move ahead. The three units of the Global Programme for Vaccines and Immunization—Vaccine Research and Development, Vaccine Supply and Quality, and the Expanded Programme on Immunization—can address barriers to delivery of old vaccines