

## IBM accused of ignoring employee 'cancer cluster'

Two former IBM employees who developed cancer are suing the electronics giant, alleging it knowingly exposed them to carcinogenic chemicals in its 'clean rooms'. Hundreds of similar lawsuits have been filed against electronics companies, placing mounting pressure on the industry to recognize this latest 'cancer cluster'.

More than 200 such cases are pending against IBM. Alida Hernandez and James Moore have filed suit against IBM and several of its chemical suppliers, including Dupont, Union Carbide, Shell Oil and Eastman Kodak.

Hernandez, 73, developed breast cancer in 1993, and Moore, 62, contracted non-Hodgkin lymphoma in 1995. They allege that although they were routinely exposed to trichloroethylene, toluene, benzene and other carcinogenic chemicals, and showed clear signs of chemical poisoning, they were sent back to work.

"Clean rooms are a closed system with recirculating air, in which workers are continually exposed to a broad array of chemicals," says Joseph LaDou, clinical professor of occupational medicine at the University of California in San Francisco. "They were designed by engineers without any input from health-care experts."

IBM has always used the best available technology of the time to handle and store chemicals, says Bill O'Leary, director of communications for IBM's microelectronics division. "Many of the lawsuits against the industry are referring back to manufacturing processes from 30 years ago," O'Leary says. "Over the decades, we have learned a lot about

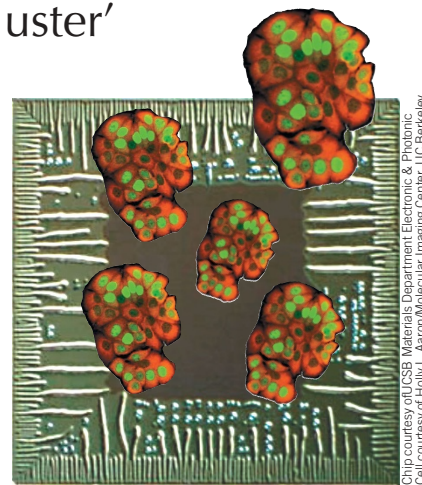
protecting employees from chemicals."

As early as 1983, the Swedish Cancer Environment Registry indicated that workers in the electronics industry had a significantly elevated risk of developing cancers of the mouth, pharynx and respiratory system. The US Bureau of Labor Statistics reported in 2001 that the rate of occupational illness was nearly three times higher in semiconductor workers than in the overall population. Based on small sample sizes, others have reported higher rates of lung, brain, stomach and breast cancers.

Given the size of the electronics industry's workforce, conducting a large-scale epidemiological study on health risks should be relatively straightforward. No such study has been published to date, but evidence for the dangers of clean rooms might already be in existence, as US companies keep detailed employee files.

For example, IBM has a 'corporate mortality file', which lists the cause of death for more than 30,000 full-time employees over a 30-year period. Hernandez and Moore hired Richard Clapp, a Boston University epidemiologist who specializes in the effects of toxic chemicals, to analyze the file. Using a statistical technique called proportional mortality ratio (PMR) analysis, Clapp found a significant increase in the cancer death rate of IBM employees. He says that the trend could have been detected as early as 1975 in men, and 1985 in women.

But presiding Judge Robert Baines has ruled that the plaintiffs cannot present the database as evidence. "The corporate mortality file includes



Chip courtesy of UCSB Materials Department Electronic & Photonic Cell courtesy of Holly L. Aaron/Molecular Imaging Center, UC Berkeley

only a fraction of people that ever worked at IBM," says O'Leary. "All you can tell from it is that, overall, IBM employees have a higher incidence of early death ... nothing in the file makes any association between their deaths and whether they worked with chemicals."

IBM has also argued that the PMR analysis used by Clapp has many shortcomings. But LaDou says PMR is reliable and is frequently used in analysis of occupational settings; a Medline search lists more than 3,000 references for PMR in occupational mortality studies.

Also at issue is an IBM database of employees' working conditions. "Why can't they combine this data with that of the corporate mortality file?" asks LaDou. "That would be exactly the kind of data we need to determine what aspects of clean-room work are associated with cancer."

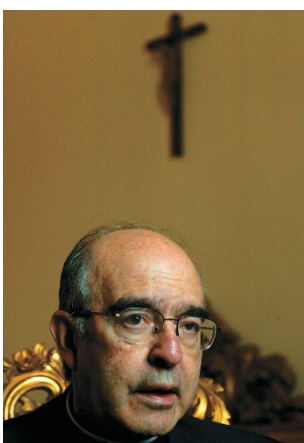
*Kristine Novak, San Francisco*

## Health agencies scramble to counter Vatican's 'condom' nation

The Vatican's well-known opposition to condoms stirred fresh controversy when Roman Catholic leaders announced on television that HIV is small enough to pass through condoms. The World Health Organization (WHO) and others have been furiously trying to counter the messages, saying the Vatican's stance is contributing to the spread of the AIDS epidemic.

"The AIDS virus is 450 times smaller than the spermatozoon," Cardinal Alfonso López-Trujillo, president of the Pontifical Council for the Family, said in a BBC interview on 12 October. "The spermatozoon can easily pass through the 'net' that is formed by the condom."

Some Catholic officials manipulate people by saying that condoms encourage promiscuity, says José Santos, a physician at the Medicus Mundi organization. In Kenya, where one-third of people are Catholic and one-fifth are HIV-positive, Church representatives have publicly



Tony Gentile/Reuters

Catholic leaders say condoms don't block HIV.

burned condoms. In Mozambique, where a recent survey showed that 25% of pregnant women are HIV-positive, Catholic priest Alberto

Vera labeled the government campaign to promote condoms a "kind of subliminal racism"

To counter the Vatican's message, the WHO and the European Commission have been publicizing details of research studies refuting the claim. "Condoms are part of the solution," said Poul Nielson, Commissioner for Development and Humanitarian Aid. "The condemnation of condoms is part of the problem."

Church officials use arguments such as that latex pores dilate in tropical heat and allow the virus in, says Manuel Corachán, head of Tropical Medicine at Barcelona's Hospital Clínic.

"[The Vatican is] going to need to come up with scientific proof," says HIV expert Thomas Quinn of the Infectious Diseases Society of America. "There is a multitude of publications that show that the virus cannot pass through the latex of the condom."

*Xavier Bosch, Barcelona*