age size of a house doubled. "If everybody in the world lived the way we do in Canada," he said, "we would need the resources of 5 more planets." And science isn't helping, because "for most of humanity, life is not getting better." Suzuki laughed at the notion of managing a forest "scientifically. They are taking about a plantation, not a forest. Only nature and time can grow a forest."

Meanwhile, Ontario family physicians and the David Suzuki Foundation are speaking out on the health effects of air pollution and global warming in an attempt to raise public awareness about the issues. "Air pollution can be deadly for some, and all of

us are affected by even very low levels of pollutants," Dr. David Mathies, president of the Ontario College of Family Physicians, said as he launched the campaign in November. "We see the effects of air pollution on people's health day after day, and prevention is part of our jobs." — *Barbara Sibbald*, CMAI

Research Update

Is mammography screening effective?

A controversial new study of mammography screening for breast cancer has concluded that the procedure may not be effective in reducing overall mortality rates. The study, conducted by researchers at the Nordic Cochrane Centre in Denmark, was published in *The Lancet* (2000;355:129-34).

"We are sceptical whether mammography is justified," says principal researcher Dr. Peter Gøtzsche. "The [beneficial] effect is doubtful. If there is an effect we believe it would be considerably smaller than those numbers we have been traditionally told."

The European investigators were prompted to examine this issue after a Swedish study found that there had been no decrease in breast cancer mortality since the introduction of a national screening program in 1985. They examined the results of 8 published trials that had randomly assigned women to either a mammography-screening group or a non-screening group. Of these trials, the researchers felt only 2 — a Canadian study published in CMA7 and a Swedish study - met the criteria for randomization. The effect of screening on breast cancer mortality was calculated separately for these 2 studies.

Evidence from the Canadian and Swedish studies revealed that there was no significant effect on mortality as a result of mammography screening, the researchers concluded. The other studies, however, showed that screening reduced



Mammogram shows lump (later diagnosed as carcinoma) in the breast of a 36-year-old woman. Reproduced from Samuels et al, "Gestational breast cancer" (Can Assoc Radiol J 1998;49:175).

the risk of death by approximately 25%. There is also a "dark side" to screening that is often overlooked, notes Gøtzsche. "False positives are not often talked about. Some of the tumours you find are false positives, or are so small and grow so slowly they would not have been found in the patient's lifetime."

In a response to the controversial study, published in the same issue of The Lancet, Dr. Harry de Koning, a member of the Rotterdam Department of Public Health, notes that, although the link between screening and mortality is important, the researchers "have disregarded the fact that other factors probably have a more important part in lowering the mortality rate through screening." He also points out that the rate of breast cancer in Dutch women aged 60 to 69 is now falling, although no significant decline in mortality was experienced during the first 9 years the screening program was in operation throughout the Netherlands.

Gøtzsche and his colleagues have written to the researchers involved in the 8 studies that were examined inviting them to collaborate on further analysis. "We intend to look more closely at the studies to see if there are data that can be used from the 6 nonrandom trials and if additional information from other trials exists. We will get more data [but] we are highly doubtful about the benefit of screening." — Donalee Moulton, Halifax