were not significantly different: mutation carriers in an ethnically diverse population of high-risk families and were more likely to have younger age of onset (35 versus 40 years, median age), to develop cancer in the other breast (4.0% versus 0.5%), and are more likely to have tumors that are estrogen- and progesterone-receptor negative (64% versus 35% for estrogen receptor status and 70% versus 34% for progesterone status). All other features of the patients and tumors were not significantly different: menopausal status, tumor stage, histology, and overall survival.

Looking at breast disease in BRCA2 mutation carriers in an ethnically diverse population of high-risk families, O. I. Olopade, M.D., from the University of Chicago Cancer Research Center in collaboration with Myriad Genetics in Salt Lake City, Utah, found that the most common age of onset in BRCA2 carriers is 40 to 49 and that several other cancers, including prostate, bladder, colorectal, pancreatic, lymphoepithelioma, and esophageal cancer were frequently found in first- or second-degree relatives of mutation carriers. She also found that two out of the 10 carrier families had one or more cases of male breast cancer.

Caryn E. Lerman, Ph.D., from the Lombardi Cancer Center at Georgetown University in Washington, D.C., reported the results of BRCA1/2 testing in members of hereditary breast and ovarian cancer families. Lerman and her collaborators looked at the impact that testing had on the quality of life (in terms of depression and impairment of functioning) on surveillance practices, and on decisions about prophylactic surgery in family members. Of the 258 study participants, 165 elected to be tested and 93 declined.

Her interim analysis showed that those who declined testing experienced the highest levels of psychological distress while the noncarriers (84 people) were the least affected. Surveillance rates, however, were low; only 24% of carriers and 21% of decliners reported receiving their 6-month mammogram. Likewise, 6% of carriers reported receiving CA125 or transvaginal ultrasound tests compared with 2% of decliners. Most carriers did not elect surgery; 1% had a prophylactic mastectomy by 6-month follow-up and 2% a prophylactic oophorectomy.

Lerman concluded that "BRCA1/2 testing in high risk family members who receive adequate genetic counseling may not have adverse psychological effects, but may not lead to significant reductions in cancer morbidity and mortality."

Since mutations in BRCA1 and BRCA2 account for no more than 5% to 10% of all breast cancer in the United States, scientists have hypothesized that other susceptibility genes may exist that carry low absolute risk for an individual, but are present in a high percentage of the general population. Enzymes or receptors that control the metabolism and cellular movement of estrogens are one class of these susceptibility genes.

— Nancy J. Nelson

Policy Board Recommends Raising Prices to Cut Tobacco Use

The single most effective way to reduce tobacco use among current smokers and to deter new smokers is to raise the price of tobacco products, according to Peter M. Howley, M.D., chair of the National Cancer Policy Board. In the NCPB’s recently issued first policy statement, “Taking Action to Reduce Tobacco Use,” the board recommended that cigarette prices be raised by $2 per pack to reduce consumption.

The revenues generated by the increased prices would be used to support tobacco control and treatment programs, and to fund research. The report also calls for penalties to be imposed on manufacturers whose products attract young smokers, if underage smoking cessation goals are not met.

The NCPB was created in 1996 to confront policy issues related to the prevention, control, diagnosis, treatment, and amelioration of cancer. The report resulted from a workshop in July that also produced a letter to members of the Executive Branch and Congress (see News, Aug. 6, 1997).

Preventing children and teenagers from starting to use tobacco is the group’s primary long-term goal, while
cessation of smoking in current smokers at all ages is essential to reducing the enormous health toll of tobacco. The NCPB's three-point plan to reduce the tobacco death toll calls for preventing new smokers from starting, getting current smokers to quit, and reducing environmental exposure to tobacco toxins. The policy statement focuses on seven key efforts to accomplish these goals: 1) price increases, 2) federal regulation, 3) state and local tobacco control programs, 4) performance monitoring, 5) cessation programs, 6) research, and 7) international health efforts.

Raising tobacco prices has been proven to be effective, not only because it encourages current smokers to quit but also because it discourages young potential smokers, who are more price-sensitive, from starting. A significant price increase, such as the suggested $2 per pack increase, would have the desired greater impact on young people, the NCPB stated. "That $2 would be a 100% increase in cost," said Howley, chairman of pathology at Harvard Medical School, Boston. "This would result in a 60% decrease in use among youth." The use of a significant price increase has also recently been recommended by former Surgeon General C. Everett Koop, M.D., and former Food and Drug Administration Commissioner David A. Kessler.

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**Surveys Show Employers and Employees Have Misgivings About Workers With Cancer**

At any cocktail party, one of the most commonly asked questions is "what do you do?" or "where do you work?" In the United States, what a person does for a living plays a major role in their self-image and how others perceive them — and cancer patients are no exception.

A majority of cancer survivors say their job helped them maintain emotional stability during treatment and many miss relatively few days of work during therapy. But according to two recent surveys, Americans have misgivings about co-workers with cancer and grave concerns about managing their own careers if they were diagnosed with the disease.

A 1997 telephone survey of 662 employed adult female and male Americans cosponsored by the National Coalition for Cancer Survivorship (Silver Spring, Md.) and Amgen, Inc. (Thousand Oaks, Calif.) showed that 87% of those surveyed recognize the emotional importance of work. However:

- 18% believe that people being treated for cancer are incapable of working because of side effects from treatment;
- 27% feel they would have to "pick up the slack" for a co-worker with cancer;
- 14% feel a co-worker with cancer cannot do their job as well as before they were diagnosed; and
- 42% believe a co-worker with cancer would have special needs and require special arrangements.

The same respondents said that if they were diagnosed with cancer:

- 41% would worry about losing their job;
- 59% would tell their supervisors about their diagnosis, but only 38% would tell their peers, and 28% their subordinates; and 20% would not tell anyone at their workplace they had cancer.

A 1996 telephone poll of 500 cancer survivors employed at the time of their treatment and 100 co-workers and supervisors of cancer survivors, showed that:

- a majority of survivors, 81%, say their job helped them maintain emotional stability during treatment;
- 40% of survivors missed fewer than 5 days of work during an average month as a result of their treatment;
- while 33% of supervisors felt the survivor could not handle their job and cancer, only 19% of workers felt so;
- 31% of supervisors felt the employee needed to be replaced and 14% of workers expected their supervisors to have them replaced;
- workers with cancer are fired or laid off at five times the rate of other workers in the United States (7% vs. 1.3%);
- 14% of cancer survivors say their work responsibilities were decreased as a result of their diagnosis; and
- 6% had a family member lose their job due to absences to care for the survivor.

The 1996 survey was cosponsored by Amgen and Working Woman magazine.