NEWS BRIEFS

ANTI-SMOKING EFFORTS CUT LUNG CANCER DEATHS

Lung cancer death rates among adults aged 30 to 39 are lower and are falling in most states that have strong anti-tobacco programs, according to a study published in Cancer Causes and Control (2003;14:579–585).

Lung cancer rates in this age group reflect smoking behavior over the preceding 5 to 25 years, when some communities first began to control and discourage tobacco use. The findings suggest that efforts to prevent smoking are having a positive effect, said lead researcher Ahmedin Jemal, DVM, PhD, Program Director for Cancer Occurrence at the American Cancer Society (ACS).

“Where you have high tobacco control efforts you have low lung cancer death rates,” said Jemal, “however, it’s most interesting is that the death rates decreased in most states with strong tobacco control programs, but increased in states with low tobacco control efforts.”

But many antismoking programs are in jeopardy, said study coauthor and ACS Vice President for Epidemiology and Surveillance Research, Michael Thun, MD, MS. “Unfortunately, because of tight budgets, many states are currently cutting their expenditures on tobacco control,” he said. “Now is the time to point out that these programs are working and must be sustained if the progress seen in this study is to continue.”

Lung cancer causes more deaths than any other cancer in the United States among both men and women. Roughly 171,900 people will be diagnosed with lung cancer in 2003, and 157,200 will die from it, according to ACS estimates. Cigarette smoking causes about 82% of lung cancer deaths. Smoking is responsible for more than 400,000 deaths from lung cancer and other tobacco-related cancers, other lung diseases, and cardiovascular disease each year in the United States, according to the Centers for Disease Control (CDC) and Prevention.

Throughout the late 1980s and 1990s, many states enacted laws banning smoking in workplaces, restaurants, and public buildings, raising taxes on cigarettes, or limiting advertising, especially to teenagers. But how effective have these programs been? Researchers generally look at smoking rates among adults and high school students to make that determina-
tion. Jemal and his colleagues took a different approach. They examined lung cancer trends in adults aged 30 to 39, reasoning that people who got lung cancer at younger ages—generally smokers who are genetically more susceptible—would provide an early indication of the benefit of tobacco-control policies.

“Monitoring trends in young adults is important for measuring the effectiveness of tobacco control activities,” Jemal said. Most lung cancers take decades to develop; the average age for people who develop lung cancer is close to 70, though most smokers start the habit in their teenage years. However, a decrease in lung cancer among younger people now predicts a future decrease in lung cancer among older people.

Jemal and the other ACS researchers looked at smoking patterns and lung cancer deaths between 1990 and 1994, and between 1995 and 1999. Then they compared these rates with an index of anti-tobacco programs that reflects cigarette prices and smoking restrictions in each state. Only 33 states were included in the analysis; in the other states, the number of deaths from lung cancer in the 30 to 39 age group was too small to be statistically reliable.

The lung cancer death rate in both time periods was lowest in states like Arizona and California, which had strong anti-tobacco programs. It was highest in states such as Mississippi, Arkansas, and Kentucky, which had weak antismoking programs. The death rate also dropped the most between the two time periods in states with strong antismoking programs. California’s rate fell almost 19%, while Oregon’s fell 28%. But 11 states with weak anti-tobacco programs saw the lung cancer death rate among 30- to 39-year-olds increase in the same interval. The rate in Kentucky, the state with the weakest anti-tobacco measures, rose the most—more than 34%. Missouri’s rate rose more than 29%, and West Virginia’s rose 25%. States that had strong anti-tobacco programs also had fewer current smokers and more people who had quit in the 30 to 39 age group.

These findings are in line with previous studies that found more rapidly declining rates of heart disease deaths and lung cancer incidence in California after that state adopted anti-tobacco programs in 1989. Overall, Jemal said, his findings indicate that antismoking measures are working. “There is no question about that,” he said. “Where you have stronger tobacco control activities you’re going to have lower lung cancer death rates and a greater decline in lung cancer rates.”

CHILDHOOD LEUKEMIA SURVIVORS GENERALLY DO WELL; RADIATION MOST PROBLEMATIC FACTOR FOR THOSE IN LONG-TERM REMISSION

A recent study, published in the New England Journal of Medicine (2003;349:640–649), finds that most children who remain in remission from acute lymphoblastic leukemia (ALL) for 10 years or more go on to lead lives very similar to those of people who did not have cancer. However, children whose treatment included craniospinal radiation seem to experience more problems than children who were not treated with radiation.

Ching-Hon Pui, MD, and colleagues from the St. Jude Children’s Research Hospital and the University of Tennessee Health Sciences Center followed medical outcomes and socioeconomic indicators of patients with ALL treated in clinical trials at St. Jude between 1962 and 1992. Radiation had been used to treat 597 of the patients, while 259 were treated without radiation. Radiation had been used to treat 597 of the patients, while 259 were treated without radiation. All were under age 21 when they were diagnosed (with a median age of 4.5) and all had been in remission from the leukemia for at least 10 years.

Estimated 20-year survival rates for the irradiated patients, nonirradiated patients, and the general US population were 95.1%, 98.3%, and 99.7%, respectively. (These rates are higher than the overall rates for ALL survival because...