CT Scans Cut Lung Cancer Deaths by One-Fifth

By Patrice Wendling

A large randomized national trial has provided the first evidence of a significant reduction in lung cancer deaths with a screening test.

The National Lung Screening Trial (NLST) reported a 20.3% reduction in lung cancer mortality among heavy smokers screened with low-dose helical computed tomography (CT), as compared with those given standard chest x-rays. The trial enrolled more than 53,000 older, high-risk individuals.

In addition, deaths from any cause, including lung cancer, were 7% lower among participants screened with low-dose helical CT, also known as spiral CT.

The initial results were released today by the study sponsor, the National Cancer Institute, after the study’s independent data and safety monitoring board recommended halting the trial.

“Today marks an important milestone in protecting the American public,” Secretary Kathleen Sebelius said in a statement. “Today marks a 20.3% reduction in lung cancer mortality among heavy smokers screened with low-dose helical CT. This is the kind of innovation we need to fully address the public health consequences of tobacco use.”

Until now, the effects of lung cancer screening had been inferred from a randomized feasibility trial that preceded the NLST. The FDA is seeking the public’s input on what required warnings to include on tobacco packages, including comments on the color graphics that are included in the proposal.

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Although the NLST trial cohort was ethnically representative of the high-risk U.S. population, the researchers noted that participants were highly motivated and screened at major medical centers. Thus, the results may not accurately predict the effect of CT screening for other populations.

“What has happened here is that the technology shows you can cut down on lung cancer deaths, the leading cause of cancer mortality, and save nearly as many lives as the number of people who die from breast cancer per year. We as a medical community now need to figure out how to do this in a way that the cost is acceptable to the public,” Dr. Bruce E. Johnson, an official with the American Society of Clinical Oncology and director of the Lowe Center for Thoracic Oncology at the Dana-Farber Cancer Institute in Boston, said in a statement.

A more detailed analysis of the NLST results is expected to be published in the coming months, although a paper describing its design and protocol was published by the journal Radiology. The National Cancer Institute sponsored the study.

HHS Tobacco Control Strategy Includes Graphic Warnings

By Alicia Ault

The Department of Health and Human Services issued a sweeping new tobacco control strategy that would require cigarette makers to place photographs and graphic depictions of the harms of smoking prominently on the packages or in advertising.

The graphic warnings – which will be regulated by the Food and Drug Administration – were part of a proposed rule issued by the agency. They were required by the Family Smoking Prevention and Tobacco Control Act and are the centerpiece of the 66-page strategy released by HHS.

“Every day, almost 4,000 youth try a cigarette for the first time and 1,000 become regular, daily smokers,” HHS Secretary Kathleen Sebelius said in a statement. “Today marks an important milestone in protecting our children and the health of the American public.

HHS estimates that 443,000 Americans die from tobacco-related diseases each year, with 50,000 of those deaths caused by secondhand smoke. Some 8.6 million Americans have smoking-related chronic diseases.

When this rule takes effect, the health consequences of smoking will be obvious every time someone picks up a pack of cigarettes,” FDA Commissioner Margaret Hamburg said.

The agency is going to require a disturbing photograph or cartoon graphic that takes up half a package of cigarettes or is prominently placed in an ad.

“The graphic would depict one of the following warnings: ‘Cigarettes are addictive,’” Tobacco smoke can harm your children,” “Cigarettes cause fatal lung disease,” “Cigarettes cause cancer,” “Cigarettes cause strokes and heart disease,” “Smoking during pregnancy can harm your baby,” “Smoking can kill you,” “Tobacco smoke causes fatal lung disease in non-smokers,” and “Quitting smoking now greatly reduces serious risks to your health.”

The cancer warning might have a photograph of an obviously terminally ill person in a hospital bed, or a close-up of a mouth riddled with rotting teeth and sores. The heart disease warning might have a photograph of a man clutching his chest, in the throes of a myocardial infarction.

The FDA is seeking the public’s input on which graphic depiction to use for each warning. It is accepting comments until Jan. 9, 2011. Then, the agency will select one graphic for each of the nine warnings and publish the choices in a final rule to be issued by June 22, 2011.

Manufacturers would have 15 months from that time – by October 2012 – to come into compliance. If they do not comply, their product will be banned from sale in the United States.

Public health advocacy groups applauded the HHS plan and the FDA proposal. “The new warnings represent the most significant change in U.S. cigarette warnings since they were first required in 1965,” Matthew L. Myers, president of the Campaign for Tobacco-Free Kids, said in a statement.

The HHS strategy paper recommended expanding tobacco cessation services and accelerating the adoption of smoke-free laws across the country. According to the HHS, if the agency receives funding and all of the initiatives were to go forward, the country could meet the Healthy People 2010 objective to reduce the smoking rate to 12% of American adults.