More U.S. Young Women Diagnosed With Lung Cancer at a Higher Rate Than Young Men, New Report Shows; Increase Extends to Older Women

Researchers from the American Cancer Society stress the need for strengthening cigarette smoking cessation programs

ATLANTA, October 12, 2023 — Reversing historical patterns, new findings led by researchers at the American Cancer Society (ACS) show higher lung cancer incidence in women than in men has not only continued in adults younger than 50 years, but now extends to women 50 to 54 years of age in the United States. The findings are published today in the *Journal of the American Medical Association (JAMA) Oncology.*

“These findings are very concerning,” said Dr. Ahmedin Jemal, senior vice president, surveillance and health equity science at the American Cancer Society and lead author of the paper. “We don’t know why lung cancer incidence rates among younger and middle-aged individuals are now higher in women than men, reversing the historical pattern. Cigarette smoking prevalence, the major risk factor for lung cancer in the United States, is not higher in younger women than younger men, as are other established risk factors such as occupational exposures.”

For this cross-sectional study, researchers analyzed population-based incidence data on lung and bronchus cancers diagnosed from 2000 to 2019 from the National Cancer Institute’s Surveillance, Epidemiology, and End Results (SEER) program, covering nearly 50% of the U.S. population. Cases were categorized by sex and age in 5-year increments and year of diagnosis.

The study results showed the declines in lung cancer incidence rates between 2000-2004 and 2015-2019 were greater in men than women, leading to higher incidence in women aged 35-54 years. Among individuals aged 50-54 years, for example, the rate per 100,000 person-years decreased by 44% in men compared to 20% in women. As a result, the female-to-male incidence rate ratio increased from 0.73 during 2000-2004 to 1.05 during 2015-2019. Among individuals aged 55 years or older, however, incidence rates continued to be lower in women, although differences became increasingly smaller. Among persons aged 70 to 74 years, for example, the female-to-male incidence rate ratio increased from 0.62 during 2000-2004 to 0.81 during 2015-2019.

“Lung cancer is still the leading cause of cancer death in the U.S. with 80% of cases and deaths caused by cigarette smoking,” said Jemal. “To mitigate the high burden of the disease in young and middle-aged women, greater effort is needed to promote smoking cessation at provider and community levels, improve access to smoking cessation aids and programs through expansion of Medicaid, and increase lung cancer screening in eligible women. Also, further research is needed to shed light on the reasons for the higher lung cancer incidence in younger and middle-aged women.”

Other ACS authors on the paper include: Elizabeth J. Schafer, Dr. Hyuna Sung, Dr. Priti Bandi, Tyler Kratzer, Dr. Farhad Islami, and Rebecca Siegel.

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About the American Cancer Society

The American Cancer Society is a leading cancer-fighting organization with a vision to end cancer as we know it, for everyone. For more than 100 years, we have been improving the lives of people with cancer and their families as the only organization combating cancer through advocacy, research, and patient support. We are committed to ensuring everyone has an opportunity to prevent, detect, treat, and survive cancer. To learn more, visit cancer.org or call our 24/7 helpline at 1-800-227-2345. Connect with us on Facebook, Twitter, and Instagram.