Smokers Who Quit Before Age 40 Avoid 90% of Excess Risk of Cancer Death

Older individuals who smoke could also substantially reduce the risk of cancer death if they quit.

November 1, 2021 By American Cancer Society

A new study finds that smokers are at a higher risk – three times more likely – to die of cancer than individuals that have never smoked. Data show that those who started to smoke at earlier ages had even greater likelihood of dying from cancer. Those who began at the youngest ages (before age 10 years) had four times the cancer mortality rates in adulthood of those who had never smoked.

However, individuals who quit smoking avoided most of this excess risk, especially those who quit at younger ages.

The study, appearing in JAMA Oncology, is one of the largest studies on smoking in the United States population using nationally representative data.

To examine these relationships, investigators led by Blake Thomson, DPhil, principal scientist at the American Cancer Society, looked at the association between age at smoking initiation and cessation and cancer mortality at ages 25 to 79 years.

Among individuals who currently smoked, smoking caused an estimated 75% of cancer deaths among those who started smoking before the age of 10 years, and 59% of cancer deaths among those who started at age 21 years and older. The researchers found that those who quit smoking at ages 15-34, 35-44, 45-54, and 55-64 years avoided an estimated 100%, 89%, 78% and 56%, respectively, of the excess cancer mortality risk associated with continued smoking.

“These findings reinforce that starting to smoke at any age is extremely hazardous, but smokers who quit – especially at younger ages – can avoid most of the cancer mortality risk associated with continued smoking,” the authors concluded.

According to Dr. Thomson, “Widespread smoking cessation among individuals who currently smoke could substantially reduce cancer mortality in the coming years, accelerating progress on reducing the burden of cancer mortality in the United States. The findings reinforce the message that individuals who quit smoking before age 40 can avoid about 90% of the excess risk of dying from cancer that would be expected if they continued to smoke.”

Article: Thomson B, Emberson J, Lacey B, Lewington S, Peto R, Islami F. Association of Smoking Initiation and Cessation Across the Life Course and Cancer Mortality: Prospective Study of 410,000 US Adults. JAMA Oncology. doi: 10.1001/jamaoncol.2021.4949.

This press release was published by The American Cancer Society on October 21, 2021. It is republished by permission.

© 2026 Smart + Strong All Rights Reserved.
http://beta.docker.realhealthmag.com/article/smokers-who-quit-before-age-40-avoid-90-percent-excess-cancer-death