

Nearly Half of China Cancer Deaths Attributable to Modifiable Risk Factors

A new report finds more than half of all cancer deaths in men in 2013 in China and more than a third of those in women were attributable to a group of potentially modifiable risk factors: smoking, alcohol, nutrition, weight, physical activity, and infections. The study [appears in *Annals of Oncology*](#), and concludes that effective public health interventions to eliminate or reduce exposure from these risk factors can have considerable impact on reducing the cancer burden in China.

Cancer is the leading cause of death in China, with 4.3 million new cancer cases and 2.8 million cancer deaths estimated to occur each year. That burden is expected to increase in the coming decades because of aging of the population as well as changes in lifestyle that increase cancer risk, such as excessive calorie intake and physical inactivity.

To investigate further, a multi-agency team of researchers led by Farhad Islami, M.D., Ph.D. of the American Cancer Society estimated the number and proportion of cancer deaths and cases attributable to ever-smoking, second-hand smoking, alcohol drinking, low fruit/vegetable intake, excess body weight, physical inactivity, and infections in China, using contemporary data from nationally representative surveys and cancer registries. Other investigators were from the National Cancer Center/Cancer Hospital, Chinese Academy of Medical Science and Peking Union Medical College, Cancer Council NSW, Sydney, Australia, the University of Sydney, Emory University, and Imperial College London.

They found 717,910 (52%) cancer deaths in men and 283,130 (35%) in women in 2013 in China were attributable to the risk factors considered in the analysis. The corresponding numbers for cancer cases were 952,520 (47%) in men and 442,650 (28%) in women. Among both sexes combined, nearly one million (approximately 996,000) or almost half of all cancer deaths and 1,388,800, or 39% of all cancer cases in China in 2013 were attributable to the studied risk factors.

“Our analysis likely underestimates the number of cancers attributable to modifiable risk factors because we were not able to include all potentially modifiable risk factors, notably indoor air pollution from using coal for cooking and heating, which is a major risk factor for lung cancer in women in China,” said Dr. Islami.

By risk factor, the greatest attributable proportions of cancer deaths in men were for ever-smoking (26%), hepatitis B (HBV) infection (12%), and low fruit/vegetable intake (7%). In women, HBV infection (7%), low fruit/vegetable intake (6%), and second-hand smoke exposure (5%) were the largest contributors.

They conclude: “Our findings reinforce the need for broad implementation of known interventions and the development of new strategies to reduce exposures to established (smoking and carcinogenic infections) and emerging (alcohol drinking, excess body weight, and physical inactivity) risk factors in the country.”

[Article](#): F. Islami, W. Chen, X. Q. Yu, J. Lortet-Tieulent, R. Zheng, W. D. Flanders, C. Xia, M. J. Thun, S. M. Gapstur, M. Ezzati, A. Jemal; Cancer deaths and cases attributable to lifestyle factors and infections in China, 2013. *Ann Oncol* 2017 mdx342. doi: 10.1093/annonc/mdx342

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