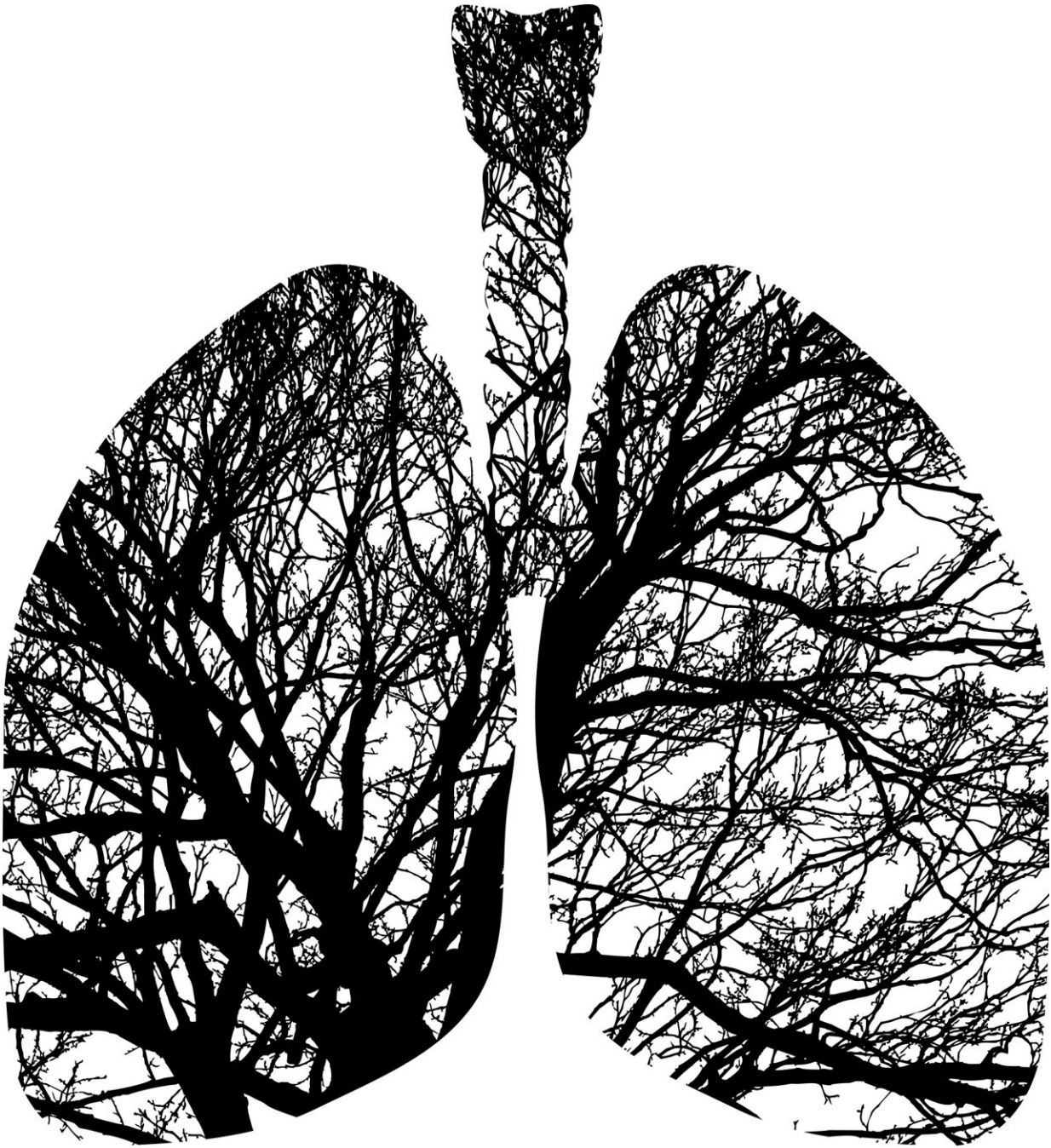


Balkan countries and Poland rank highest in lung cancer risk for ages 50 to 69, attributable to air pollution

September 9 2021



Credit: Pixabay/CC0 Public Domain

Five European countries rank highest for lung cancer risk among those aged 50 to 69 years attributable to air pollution, according to research

presented in today's Presidential Symposium Plenary Session at the IASLC 2021 World Conference on Lung Cancer.

Although [tobacco smoke](#) is clearly a major cause of [lung cancer](#), a recent analysis determined that worldwide, air [pollution](#) accounts for 14% of lung cancers, according to data reported by Christine Berg.

The causal evidence of a link between air pollution and lung cancer has been building for decades, but the risk varies widely in different regions of the world, depending on the age of the population, the amount of tobacco smoking over time, and the amount of air pollution in the country. Berg and co-researcher Dr. Joan Schiller, an adjunct professor at the University of Virginia and a Board Member of the Lung Cancer Research Foundation, sought to better understand the worldwide variability in air pollution attributable to lung cancer.

Berg conducted a review of the literature on the burden of indoor and outdoor air pollution. She assessed the burden of lung cancer by country from air pollution by querying The Global Burden of Disease Compare publicly accessible database. Lung cancer mortality was chosen as the endpoint in an age-standardized population of 100,000. Because the incidence of lung cancer increases with age, two age groups were selected: Ages 50-69, and 70 and older. Both genders were combined in the analysis. Berg ranked the top 15 countries in each age group and compared changes in relative country ranking by age group.

According to her analysis, Serbia (36.88 per 100,000), Montenegro (34.61 per 100,000), North Macedonia (30.67 per 100,000), Bosnia/Herzegovina (30.64 per 100,000), and Poland (27.97 per 100,000) ranked highest for risk of lung cancer attributable to air pollution among ages 50-69.

Among the 70 and older group, China (98.55 per 100,000), Mongolia

(71.11 per 100,000), North Korea (63.45 per 100,000), Laos (62.07 per 100,000), and Montenegro (61.80 per 100,000) ranked highest.

"For comparison, in the United States the number of lung cancer deaths per 100,000 attributed to [air pollution](#) in ages 50 to 69 is 3.91 and is 13.62 for 70 and older," Berg said. The Balkans, Poland, Turkey, China, and some southeast Asian countries have the highest attributable risks. Serbia had the highest number of attributable deaths in the 50-69 age group, whereas China had the highest in the 70 and older age group.

"Patterns of cigarette smoking and amounts of pollution from fossil fuel energy sources are most likely the primary drivers of the variability in risk attributable to lung cancer," said Berg. "As the tobacco epidemic is addressed, we also need to address other preventable causes of [lung cancer](#)."

Provided by International Association for the Study of Lung Cancer

Citation: Balkan countries and Poland rank highest in lung cancer risk for ages 50 to 69, attributable to air pollution (2021, September 9) retrieved 6 May 2024 from <https://medicalxpress.com/news/2021-09-balkan-countries-poland-highest-lung.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--