

Lowering China's pollution could prevent about 900,000 cardiovascular deaths by 2030

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Air pollution is a leading cardiovascular disease risk factor in Beijing and urban China. Lowering air pollution to the level it was during the 2008 Beijing Olympics could prevent about 900,000 cardiovascular deaths and gain millions of life years in urban China by 2030, according to a study presented at the American Heart Association's Scientific Sessions 2015.

Provided by American Heart Association

To reduce pollution for the 2008 Olympics, the government temporarily closed factories, construction sites and limited auto traffic. In the study, researchers simulated two air quality improvement scenarios and projected the results based on available research. One simulation was of the air quality during the 2008 Beijing Olympics, which was a fine particle matter (PM2.5) level of 55 $\mu\text{g}/\text{m}^3$. The other was of the World Health Organization's recommendation of 10 $\mu\text{g}/\text{m}^3$. They also projected the effect of a 50 percent reduction in smoking, second hand smoke and lowering systolic high blood pressure to 140 mm Hg, each over 5 years.

Researchers found that gradually achieving 2008 Olympic [air quality](#) levels over 10 years would:

- reduce stroke deaths by 2.7 percent and reduce coronary heart disease deaths by 7.2 percent in urban China from 2015 to 2030; and
- prevent 304,000 stroke deaths, 619,000 [coronary heart disease](#) deaths and gain 4.2 million life years in urban China from 2015 to 2030.

The more aggressive World Health Organization pollution goal would yield greater life year gains than tobacco or systolic blood pressure control.

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