

Air Pollution Kills 200,000 People in the US Every Year *[Natural World News 02 September 2013]*

Air pollution is behind nearly 200,000 early deaths every year in the United States, according to a new study by researchers from Massachusetts Institute of Technology.

According to Steven Barrett, an assistant professor of aeronautics and astronautics and the study's lead author, those who die from air pollution-related causes do so on average 10 years earlier than they otherwise might have.

Published in the journal *Atmospheric Environment*, the report utilizes emissions data from the Environmental Protection Agency's National Emissions Inventory, a catalog of emissions sources nationwide.

The researchers divided this information into electric power generation, industry, commercial and residential sources, road transportation, marine transportation and rail transportation. The team then fed the results into a simulation of the impact of emissions on particles and gases in the atmosphere.

In order to determine which of these emissions represented the greatest impact, the researchers removed each sector from the simulation one at a time, observing the difference in pollutant concentrations as they did so.

Finally, the team overlay the resulting data with population-density maps of the nation to determine which populations were most exposed to each source of air pollution.

California, they found, topped the charts with an estimated 21,000 early deaths every year due to air pollution, largely as a result of road transportation and commercial and resident emissions.

In terms of cities, Baltimore was home to the highest emissions-related mortality rate, with 130 out of every 100,000 residents likely killed each year as a result of poor air quality.

Nationwide, the scientists determined that road transportation is the number one contributor to emissions-related deaths, causing some 53,000 deaths annually. This was closely followed by power generation at 52,000 deaths.

"In the past five to 10 years, the evidence linking air-pollution exposure to risk of early death has really solidified and gained scientific and political traction," Barrett said. "There's a realization that air pollution is a major problem in any city, and there's a desire to do something about it."