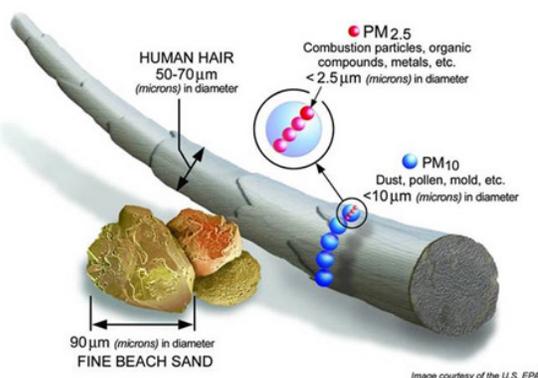


## Protective Health Standards for Particulate Pollution Will Save Lives

### Today's Particulate Pollution Problem

Fine particle air pollution, or soot, is one of the deadliest and most dangerous forms of air pollution. Inhalation of these tiny particles results in serious health impacts, including premature death, aggravation of heart and lung disease, changes in lung function and increased respiratory symptoms. Particle pollution comes from tailpipe emissions, diesel exhaust, power plant emissions, wood burning and other air pollution sources, and consists of soot, aerosols, metals, acids and other microscopic particles. Pre-existing health conditions make people particularly susceptible to harm from

particle pollution – nearly 26 million Americans have asthma, including 7 million children; over 12 million have been diagnosed with chronic obstructive pulmonary disease; 74 million have cardiovascular disease; and 25 million have diabetes. These health conditions are thought to be exacerbated in part as a result of the inflammatory (or immune system) response generated following exposure to particulate pollution.



### Current Standards Are Not Protective of Human Health

The Clean Air Act requires the Environmental Protection Agency to establish air quality standards which are protective of public health and welfare. Currently, EPA has in place an annual particle pollution standard of 15 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and a daily (24-hour) standard of 35  $\mu\text{g}/\text{m}^3$ . Numerous peer-reviewed scientific studies support the conclusion that fine particulate pollution is causally associated with serious adverse health effects in humans, at exposure levels far below the current standards. The Clean Air Scientific Advisory Committee, EPA's independent science advisors, unanimously concluded that the current standards do not protect human health.

### Protective Particulate Pollution Air Quality Standards for Healthier, Longer Lives

Estimated Annual Number of Adverse Health Effects Avoided if Protective Standards are Adopted	
Health Effect	Cases Avoided
Premature death	35,700
Acute bronchitis	29,800
Heart attacks	2,350
Asthma attacks	1,400,000
Hospital and emergency room visits	23,290
Missed work or school days	2,700,000

An annual particulate pollution air quality standard of 11  $\mu\text{g}/\text{m}^3$  in combination with a daily standard of 25  $\mu\text{g}/\text{m}^3$  could prevent more than **35,000 premature deaths every year**. The protective standards would lead to **economic benefits** for the American public of **\$281 billion every year**, associated with saving lives and reducing disease.

Source: "Sick of Soot," 2011.

<http://earthjustice.org/documents/report/pdf/sick-of-soot-how-the-epa-can-save-lives-by-cleaning-up-fine-particle-pollution>