

# Michael Greenstone and Environmental Economics

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2025-03-11

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## Effects of Air Pollution

- 1-percent reduction in TSPs results in a 0.35 percent decline in the infant mortality rate at the county level
- 2500 fewer infants died from 1980–1982 recession than would have in the absence of the TSPs reductions
- (Chay and Greenstone 2003)

## Effects of Climate Change

- By the end of the century climate change will lead to increases of 3 percent in the age-adjusted mortality rate and 11 percent in annual residential energy consumption.
- (Deschênes and Greenstone 2011)

## Thoughts for Evaluation

- Economic shock and natural experience
- Make use of regulatory and climate data
- Communication for policy change

## Links

- [Climate Impact Lab](#)
- [Air Quality Life Index](#)

## References

- Chay, Kenneth Y., and Michael Greenstone. 2003. “The Impact of Air Pollution on Infant Mortality: Evidence from Geographic Variation in Pollution Shocks Induced by a Recession\*.” *The Quarterly Journal of Economics* 118 (3): 1121–67. <https://doi.org/10.1162/00335530360698513>.
- Deschênes, Olivier, and Michael Greenstone. 2011. “Climate Change, Mortality, and Adaptation: Evidence from Annual Fluctuations in Weather in the US.” *American Economic Journal: Applied Economics* 3 (4): 152–85. <https://doi.org/10.1257/app.3.4.152>.