

Agenda No. 1

Health Studies Update

AQMD Governing Board Retreat
April 12 - 13, 2012

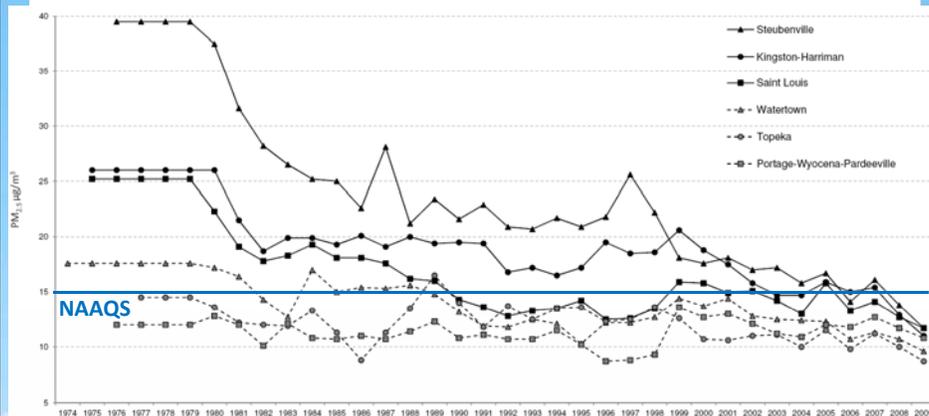
Cleaning the Air That We Breathe...

Harvard 6-Cities Study

- Participants recruited 1974-1977
 - 25-74 years old at enrollment
 - PM_{2.5} measured at central site
 - Vital status & cause of death to 2009
 - PM_{2.5} levels declined overall
 - Annual PM_{2.5} as low as 8 µg/m³
- Watertown, MA
 - Kinston & Harriman, TN
 - St. Louis, MO
 - Steubenville, OH
 - Portage, Wycena, Pardeeville, WI
 - Topeka, KS

Lepeule J, Laden F, Dockery D, Schwartz J
Chronic Exposure to Fine Particles and Mortality: An Extended Follow-Up of the Harvard Six Cities Study from 1974 to 2009.
Environ Health Perspect :- <http://dx.doi.org/10.1289/ehp.1104660> Online: 28 March 2012

Harvard 6-Cities Study PM_{2.5}



Harvard 6-Cities Study Findings

- With a 10 µg/m³ increase in PM_{2.5}
 - 14% increase in all-cause mortality
 - 26% increase in cardiovascular mortality
 - 37% increase in lung cancer mortality
- Relationship between long-term PM_{2.5} and mortality found to be linear
- No evidence of threshold for effects
- Estimated effects did not change over time