

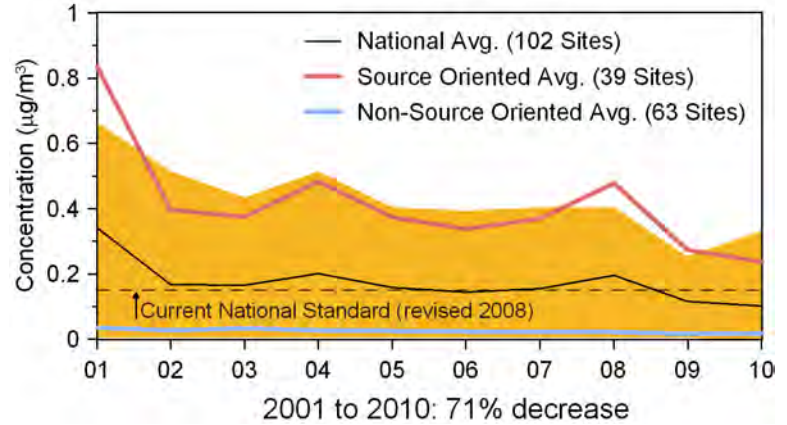


# Lead

## Trends in Lead Concentrations

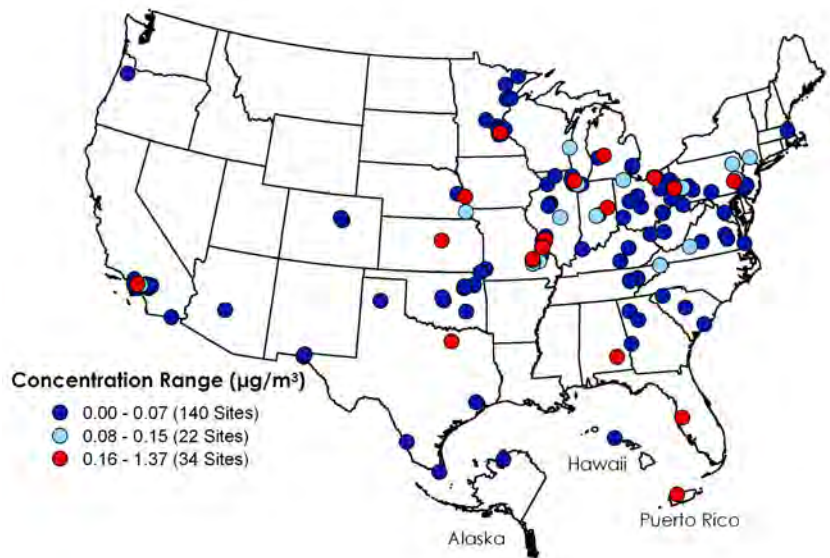
Concentrations of lead decreased approximately 71 percent between 2001 and 2010, as shown in Figure 15. Average concentrations are shown for 39 sites near large stationary sources and 63 sites that are not near stationary industrial sources. The typical average concentration near a stationary source (e.g., metals processors, battery manufacturers, and mining operations) is approximately eight times the typical concentration at a site that is not near a stationary industrial source. There are significant year-to-year changes in lead concentrations at sites near stationary sources; these reflect changes in emissions due to changes in operating schedules and plant closings. For example, national lead concentrations declined between 2001 and 2002, mostly due to lower lead concentrations at sites in Herculaneum, MO.

Figure 16 shows lead concentrations in 2010. Of the 196 sites shown, 34 sites exceeded the 2008 lead standard (0.15  $\mu\text{g}/\text{m}^3$ ). All of these sites are located near stationary lead sources. Also in 2010, EPA promulgated requirements for monitoring near additional stationary lead sources that are estimated to have 0.50 or more tons per year (tpy) lead emissions. Up to 270 new locations will be monitoring lead concentrations by the end of 2011 as a result of changes to the monitoring requirements made in 2008 and 2010.



**Figure 15. National lead air quality trend, 2001-2010 (maximum 3-month average in  $\mu\text{g}/\text{m}^3$ ).**

Note: 90 percent of sites are shown in the orange area.



**Figure 16. Lead concentrations in  $\mu\text{g}/\text{m}^3$ , 2010 (maximum 3-month averages).**

Note: The number of sites in Figure 15 (102) differs from the number of sites in Figure 16 (196) due to differences in the requirements for lead data to be considered complete for each figure