



# LEAD

## TRENDS IN LEAD CONCENTRATIONS

Nationally, concentrations of lead decreased 56 percent between 2001 and 2007, as shown in Figure 20. The national average concentrations shown are for 25 sites near large stationary sources and 78 sites that are not near stationary sources, 103 sites total. The typical average concentration near a stationary source (e.g., metals processors, battery manufacturers, and mining operations) is approximately 7 times the typical concentration at a site that is not near a stationary 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, lead concentrations declined between 2001 and 2002 mostly due to lower lead concentrations at sites in Herculaneum, Mo.

Figure 21 shows lead concentrations in 2007. Of the 109 sites shown, 25 exceeded the new lead standard ( $0.15 \mu\text{g}/\text{m}^3$ ). These sites are located in Alabama, Florida, Illinois, Indiana, Minnesota, Missouri, Ohio, Pennsylvania, Tennessee, and Texas. All of these sites are located near stationary lead sources. New requirements for monitoring near stationary lead sources will be implemented in 2010. Approximately 250 new locations will be monitoring lead concentrations.

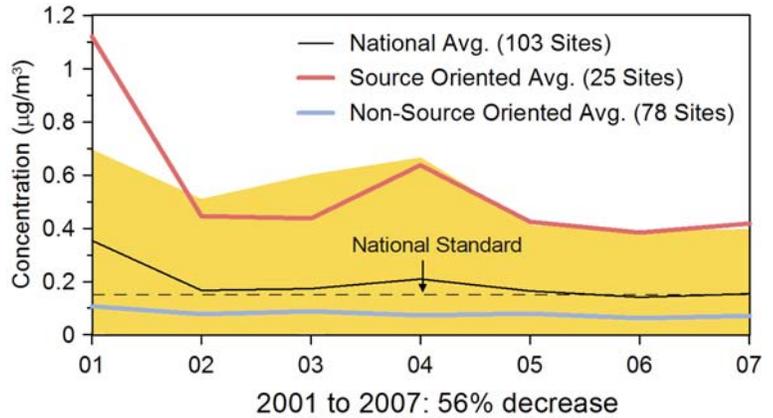


Figure 20. National lead air quality trend, 2001-2007 (maximum 3-month average).

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

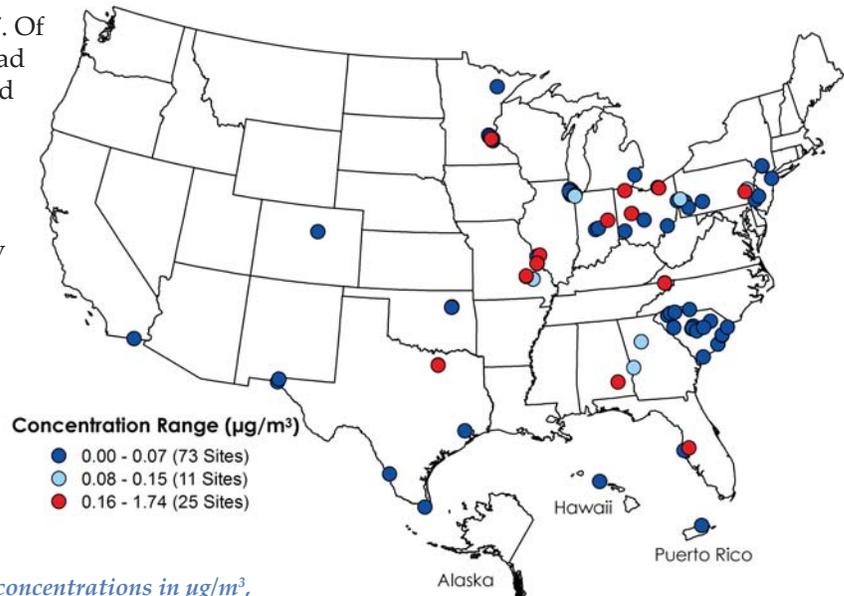


Figure 21. Lead concentrations in  $\mu\text{g}/\text{m}^3$ , 2007 (maximum 3-month averages).

### EPA Strengthens the National Ambient Air Quality Standards for Lead

On October 15, 2008, EPA strengthened the National Ambient Air Quality Standards for lead. The level for the previous lead standards was  $1.5 \mu\text{g}/\text{m}^3$ , not to be exceeded as an average for a calendar quarter, based on an indicator of lead in total suspended particles (TSP). The new standards, also in terms of lead in TSP, have a level of  $0.15 \mu\text{g}/\text{m}^3$ , not to be exceeded as an average for any three-month period within three years.

In conjunction with the revision of the lead standard, EPA also modified the lead air quality monitoring rules. Ambient lead monitoring is now required near lead emissions sources emitting 1 or more tons per year, and also in urban areas with a population equal to or greater than half a million people. Monitoring sites are required to sample every sixth day.