

TRENDS IN LEAD CONCENTRATIONS

Concentrations of lead decreased 48 percent between 2001 and 2008, as shown in Figure 23. Average concentrations are shown for 24 sites near large stationary sources and 101 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, lead concentrations declined between 2001 and 2002, mostly due to lower lead concentrations at sites in Herculaneum, MO.

Figure 24 shows lead concentrations in 2008. Of the 110 sites shown, 23 sites in 12 counties exceeded the 2008 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 additional stationary lead sources will be implemented in 2010. Approximately 250 new locations will be monitoring lead concentrations.

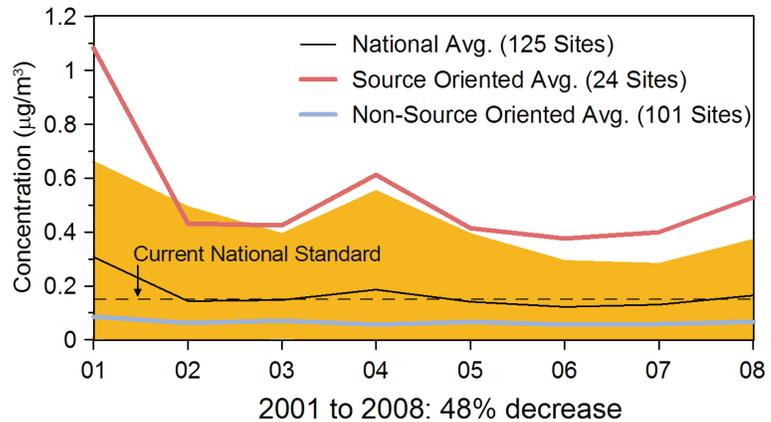


Figure 23. National lead air quality trend, 2001-2008 (maximum 3-month average in $\mu\text{g}/\text{m}^3$).

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

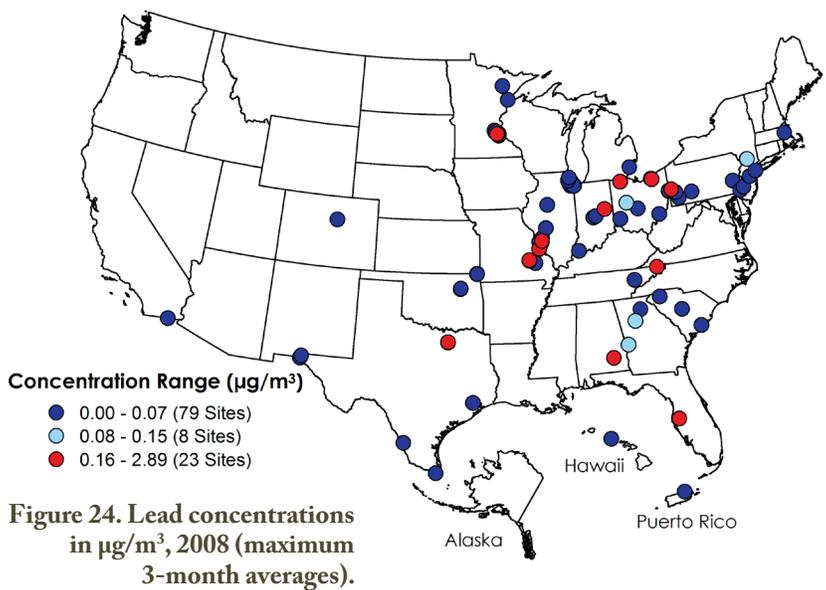


Figure 24. Lead concentrations in $\mu\text{g}/\text{m}^3$, 2008 (maximum 3-month averages).

Note: The number of sites in Figure 24 (110) differs from the number of sites in Figure 23 (125) due to differences in the requirements for lead data to be considered complete for each figure.

EPA STRENGTHENS THE NATIONAL AMBIENT AIR QUALITY STANDARD FOR LEAD

On October 15, 2008, EPA strengthened the National Ambient Air Quality Standard for lead. The level for the previous lead standard 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 standard, also in terms of lead in TSP, has 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 one 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.