

ATSDR

AGENCY FOR TOXIC SUBSTANCES
AND DISEASE REGISTRY

Omaha Lead Site Omaha, Douglas County, Nebraska

The Agency for Toxic Substances and Disease Registry (ATSDR), a public health agency of the U.S. Department of Health and Human Services, has released the Omaha Lead Public Health Assessment (PHA) for public comment. The site is on the Superfund National Priorities List (NPL). The PHA was completed to evaluate whether past, current, or future exposures to lead at the Omaha Lead site are causing harm to persons living in or near the site.

The Omaha Lead site includes residential properties, childcare facilities, schools, and other properties in the city of Omaha, Douglas County, Nebraska. (See area map on next page.) Those properties have been contaminated with lead from air emissions from lead refining activities that operated from the 1870s until 1997, and other sources, including lead-based paint. The site area covers about 8,840 acres. It extends roughly south from Ames Avenue to L Street and eastward from 45th Street to the Missouri River, excluding the central business district. ATSDR's evaluation of 2000 Census data indicates that about 86,000 persons live within the identified site area. Of these, 9,700 are children 6 years and younger. However, the site will eventually include all those properties that have lead from refining operations at soil levels greater than 400 parts per million (ppm).

Congress requires ATSDR to conduct public health assessments on all sites proposed to the NPL. In this public health assessment, ATSDR evaluates the public health significance of the Omaha Lead site. ATSDR reviewed blood-lead testing results for about 12,800 children, soil-lead data for about 15,000 properties, and various exposure scenarios.

Lead site were reported to have blood-lead levels of 10 micrograms per deciliter ($\mu\text{g}/\text{dL}$) or greater. (See map of blood-lead levels on page 3.) The majority of these children had blood-lead levels between 10 $\mu\text{g}/\text{dL}$ and 40 $\mu\text{g}/\text{dL}$ and may be at risk for decreases in IQ, slightly impaired hearing and growth, and problems metabolizing vitamin D.

ATSDR determined the following from that review:

- **The ongoing exposure to lead puts children 6 and younger living in or near the Omaha Lead initial site investigation area at risk of lead-related health effects.**
- From July 2000 through August 2002, nearly 300 children living in the Omaha
- Lead site were reported to have blood-lead levels of 10 micrograms per deciliter ($\mu\text{g}/\text{dL}$) or greater. (See map of blood-lead levels on page 3.) The majority of these children had blood-lead levels between 10 $\mu\text{g}/\text{dL}$ and 40 $\mu\text{g}/\text{dL}$ and may be at risk for decreases in IQ, slightly impaired hearing and growth, and problems metabolizing vitamin D.
- For the Omaha Lead site area, 9.7% of children 6 years and younger had blood lead levels of 10 $\mu\text{g}/\text{dL}$ or greater compared with 2.0% and 3.1% for Nebraska and the United States, respectively.
- The mean soil-lead level for the Omaha Lead site area was 437 ppm.

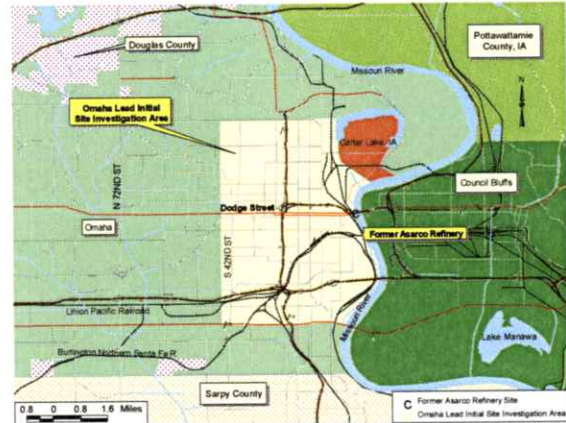
- **Two major sources of lead exist for children living in the Omaha Lead site area—lead-based paint and soil contaminated with lead from past emissions from the ASARCO refinery.** More than 60% of the homes in the site area likely have lead-based paint. More than 40 % of the properties tested in the site area had at least one soil sample above the U.S. Environmental Protection Agency (EPA) action level of 400 ppm. (See map of soil-lead levels on page 3.)

ATSDR recommends that:

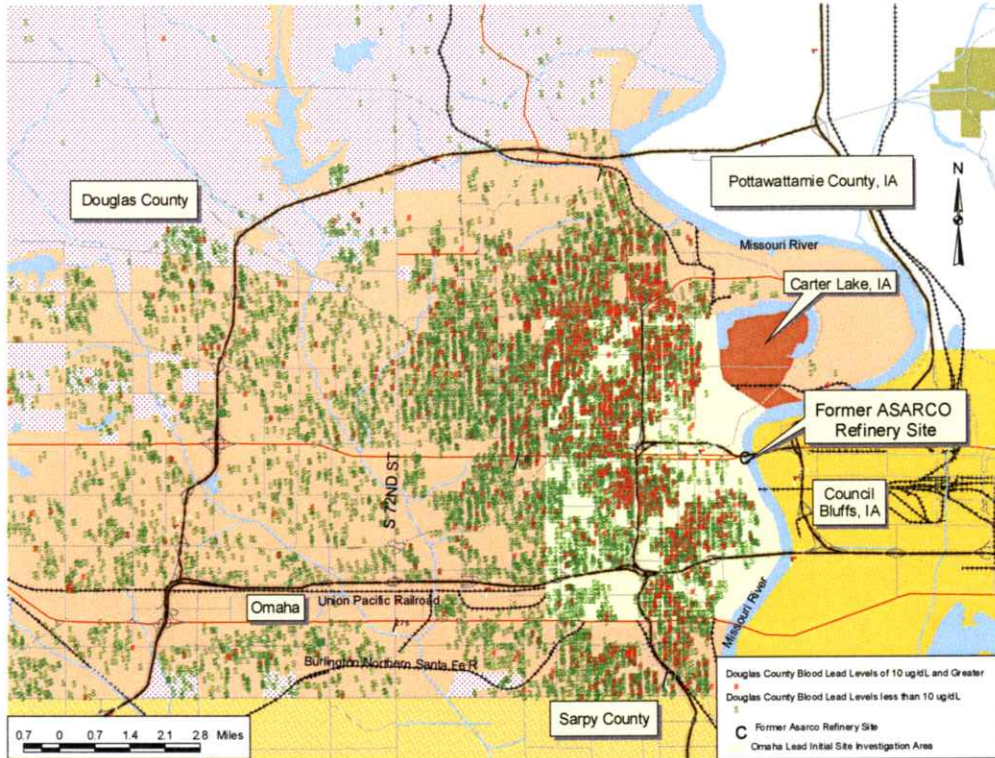
- A plan be developed that would increase public knowledge regarding lead hazards, promote primary prevention activities, and promote and facilitate yearly blood-lead testing for all children 6 years and under living in or near the Omaha Lead initial site investigation area.
- The plan includes aggressive blood-lead testing of young children to increase the likelihood of identifying children currently exposed. This would allow timely interventions such as mitigation of lead-based paint and cleanup of contaminated soil.

If you would like a copy of the Omaha Lead PHA, or if you have any questions about the document, please contact John Crellin at 404-498-0441 or toll free at 1-888-422-8737. A copy of the PHA can be downloaded from <http://www.atsdr.cdc.gov/HAC/PHA/omahalead/pdfnote.html>. You can also contact Sue Casteel, ATSDR Regional Representative, in Kansas City, Kansas, at (913) 551-1312. Other inquiries may be directed to: The Environmental Protection Agency in Kansas City at (800) 223-0425, and the Douglas County Lead Poisoning Prevention Program at (402) 444-7825.

Area Evaluated in PHA



Blood-Lead Levels in Douglas County, Nebraska



Soil-Lead Levels in Omaha Lead Site Area

