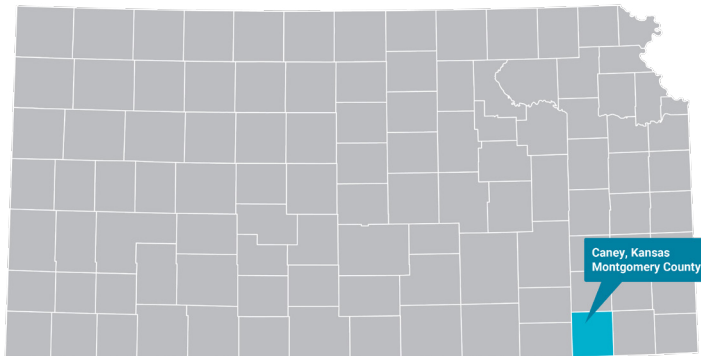


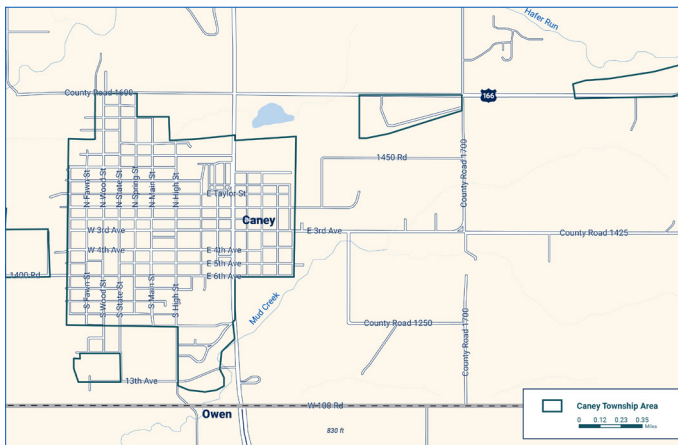
Findings on Soil Contaminants from Historical Smelting and Relocation of Wastes

CANEY (MONTEGOMERY COUNTY), KANSAS

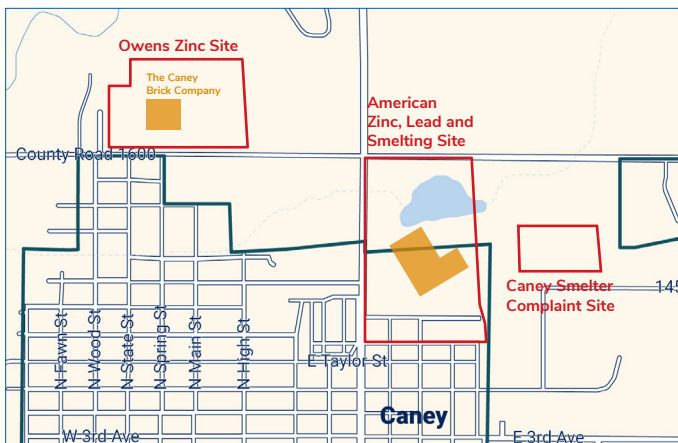
Kansas



City of Caney



North Caney and Complaint Sites



Overview:

Historic smelting activities in Caney, Kansas led to contamination of surface soils with cadmium, lead, arsenic, and zinc. This contamination happened when residents used smelting waste for landscaping and construction in their yards.

What did ATSDR do?

ATSDR used soil contamination data obtained from 2013 through 2019 from the Kansas Department of Health & Environment (KDHE) and the Environmental Protection Agency (EPA) to determine how exposure to lead mining waste could impact the health of people who live in Caney.

What did ATSDR find?

- Lead was found in all sampled properties and remains the primary concern.
- Arsenic and cadmium levels at some properties also exceeded health guidelines and might pose chronic health risks, though the sampled properties may not reflect contamination levels across the entire community.
- Although there are no known safe levels of lead exposure, the EPA in 2024 revised its soil screening level for lead from 400 mg/kg to 200 mg/kg, increasing the number of residential properties qualifying for remediation.
 - » Remediation entails identifying yards that qualify for remediation (i.e., soil lead levels exceed the screening levels), removing the contaminated soil, and replacing the contaminated soil with soil that does not exceed the lead screening levels. The entire remediation process ensures that exposure to these site-associated metals are reduced.

What are ATSDR's conclusions?

- **Health Risks from Soil:** ATSDR concludes that past, present, and future contact with contaminated soil near the site may harm health. This includes elevated cancer risk from exposure to arsenic.
- **Remediation Progress:** Around 345 properties with soil lead >400 mg/kg have been remediated, and an additional ~630 with levels >200 mg/kg have been or will be addressed, reducing community exposure.
- **Sampling Gaps and Remaining Risks:** Some potentially contaminated locations, such as areas where permission for remediation was not granted, or other areas that remain unsampled, could pose a risk, particularly to children. In addition, arsenic and cadmium were found at potentially harmful levels near the smelter site.
- **Other Exposure Pathways:** Lead exposure through outdoor/indoor air, local produce, fish, and attic dust remains possible, though we don't know enough to fully assess these risks. However, residents are advised to avoid disturbing attic dust and follow other lead safety guidance.
- **Water Supply Safety:** Drinking water is not currently considered an exposure pathway to site-associated contaminants. A 1991 assessment showed slight exceedance of lead limits, however recent reports confirm the public water supply is not impacted by site-associated contamination.

Next steps

- Continued remediation where needed, public education, and safe practices (e.g., minimizing dust exposure indoors and during gardening) are recommended. Online resources offer practical tips for reducing risk.
- Continued encouragement for preventive actions such as:
 - » Washing hands before eating
 - » Cleaning surfaces and floors with damp cloths
 - » Avoiding soil ingestion by children
- Using clean soil or vegetation to cover bare yard areas
- Following CDC recommendations for blood lead testing in children enrolled in Medicaid at ages 12 and 24 months, or ages 24-72 months if they have never been screened, as well as for children not enrolled in Medicaid with known exposures to lead. If a child's venous blood lead level is ≥ 3.5 $\mu\text{g}/\text{dL}$, CDC recommends healthcare providers perform the following: conduct a detailed exposure history, evaluate the child's diet focusing on calcium and iron intake, check for iron deficiency, monitor developmental milestones, and refer caregivers to supportive services as needed

Links to other resources:

- Recommended Actions Based on Blood Lead Level; CDC's Childhood Lead Poisoning Prevention website: <https://www.cdc.gov/lead-prevention/hcp/clinical-guidance/index.html>
- U.S. Environmental Protection Agency (EPA) Handbook: Protect Your Family from Lead in Your Home (<https://www.epa.gov/lead/protect-your-family-lead-your-home-english>)
- EPA website: Protect Your Family from Sources of Lead (<https://www.epa.gov/lead/protect-yourfamily-sources-lead>)
- CDC's National Center for Environmental Health website: Childhood Lead Poisoning Prevention (<https://www.cdc.gov/nceh/lead/>)
- CDC's resource for lead in drinking water (www.cdc.gov/nceh/lead/prevention/sources/water.htm)

Contact information

ATSDR & CDC INFO Line

 800-CDC-INFO (800-232-4636)

 TTY: 888-232-6348

 Reports available at Caney city offices, library, or by request.