Lead and Arsenic Testing in Residents Living Near the Former Colorado Smelter

What information is in this fact sheet?
This fact sheet gives you information about lead and arsenic exposure near the former Colorado Smelter. Community members, especially parents of young children, pregnant women, and women of childbearing age, should read this fact sheet.

Where did the lead and arsenic come from?
Past activities at the former Colorado Smelter in Pueblo led to:

• High levels of lead and arsenic in the residential soils near the former smelter site.
• A large slag (smelter-waste) pile that contains high levels of lead and arsenic remains on the site.

Some houses built before 1978 may have lead-based paint.

What does exposure mean and how does it happen?
Exposure is contact with a substance in an environmental media such as soil or dust. You can be exposed by swallowing it, breathing it, or getting it on your skin or in your eyes.

How can residents be exposed to lead and arsenic?

Residents can be exposed by:
Swallowing contaminated soil during activities such as

• playing in the soil
• gardening
• eating non-food items like soil or paint chips (childhood pica behavior)
• participating in household activities [contaminated soil may be tracked into the home on the clothes, shoes, and pets of residents].

Breathing in lead and arsenic dust while

• playing and riding bikes on the slag pile
• using a leaf blower on bare soil
• sweeping dust that contains lead-based paint chips or contaminated soil that was tracked into home

Why did ATSDR conduct testing in the area?
Pueblo City County Health Department (PCCHD) and the Environmental Protection Agency (EPA) were concerned about community members’ possible exposure to lead and arsenic in residential soil and in the slag pile. Exposure to lead and arsenic can hurt people especially the fetus and young children.
PCCHD and the EPA asked the Agency for Toxic Substances and Disease Registry (ATSDR) to test residents living close to the former Colorado Smelter for lead and arsenic.

The goal of the Colorado Smelter Exposure Investigation is to find out whether children, pregnant women, and women of childbearing age who live ½ a mile of the former smelter are exposed to lead and arsenic.

What did ATSDR do?
In 2013, ATSDR collected blood samples to test for lead and urine samples to test for arsenic from people living within ½ mile of the former smelter. ATSDR calls this kind of testing an “exposure investigation.”

ATSDR tested:
- Young children 9 months to less than 6 years for blood lead only
- Older children from 6 to 16 years for blood lead and urine arsenic
- Pregnant women and women of childbearing age for blood lead and urine arsenic

What did ATSDR find?

Lead:
ATSDR found high levels of lead in the blood of some children living close to the former smelter. The lead levels found in those children's blood can harm their health.

Overall, the blood lead levels for the youngest age groups (9 months to less than 6 years old and 6 to less than 12 years old) are higher than children living in other parts of the country.

Arsenic:
ATSDR did not find evidence of elevated arsenic exposure in the population tested compared to what you would see in other states.

<table>
<thead>
<tr>
<th>Related health effects in general</th>
<th>Lead</th>
<th>Arsenic</th>
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<tbody>
<tr>
<td>Babies with low birth weight</td>
<td></td>
<td>Nausea</td>
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<tr>
<td>Learning disabilities (doing poorly at school)</td>
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<td>Vomiting</td>
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<tr>
<td>Increased attention-related problems</td>
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<td>Diarrhea</td>
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<td>IQ (intelligence quotient) being lower</td>
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<td>Dehydration</td>
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<td>Anemia (fewer red blood cells)</td>
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<td>Skin disorders</td>
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<td>Stomach ache and constipation.</td>
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</table>

How can my family reduce exposure to lead and arsenic?
Keep dirt from getting into your house and into your body by:
- Wiping shoes on a doormat or removing shoes before entering your house
- Washing your hands and your children's hands often, especially before eating and after being outside
- Washing and peeling all fruits, vegetables, and root crops (such as potatoes)
- Not eating food, or smoking when working in the yard
- Damp mopping floors and damp dusting counters and furniture regularly
- Bathing dogs regularly
- Washing your children's hands and feet after they have been playing outside
- Washing the pacifiers, bottles, and toys whenever they fall on the floor and after the children have played outside,
- Not playing on the slag pile.

If you want more information:

Availability Session for the Community
Location:  St. Mary’s Church,
located at:  307 East Mesa Ave. Pueblo, CO.
Date:  Thursday, 9/24, 2015 from 11:00 a.m. to 2:00 p.m.

And

Public Meeting with Questions and Answers
Location:  Rawlings Public Library
located at:  100 E. Abriendo Ave. Pueblo, CO. 81004,
Room:  Rawlings Ryals Special Events Room
Date:  Thursday, 9/24, 2015 from 5:00 to 8:30 p.m.

You can contact:
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