**Understanding Your Soil Lead Screening Results**

**Disclosures:** This soilSHOP is a community health education event where people are offered free lead screenings to raise awareness of potential lead presence in their soil sample, and about how to avoid exposure to lead while gardening or playing in yards. The screening method will provide participants with same-day screening results, but cannot provide information about sources of lead in soil. Participants may wish to seek further laboratory testing to confirm their lead screening result. soilSHOP staff will help explain soil screening results and share information on ways to reduce potential exposures to lead in soil.

**Things to Remember about Lead in Soil**

- **There is no known safe blood lead level.**
  - Lead is a health concern for young children and pregnant women.

- **Lead poisoning is a preventable disease.**
  - Get your children tested for lead. Children under 6 years of age are at most risk. If you are pregnant, lead can harm your baby.
  - Identify, control or safely remove lead hazards in your environment.

- **Lead is common in urban settings.**
  - One screened sample may not tell the whole story about lead in your yard or garden.
  - If you are concerned about your soil lead screening result, consider getting your soil further tested by a laboratory.

- **Avoid exposures to all sources of lead.**
  - Reduce lead exposure from garden soil by washing hands, removing shoes before entering the home, and washing all vegetables and fruits before eating.
  - Always use lead-safe practices, both outdoors and indoors, to reduce lead exposure for your family.
What is a soilSHOP?
A soilSHOP (soil screening, health, outreach and partnership) is a community health educational event where people can learn more about potential lead contamination in their soil and how to prevent or reduce exposures to lead in soil. Lead is often found in urban soil due to past uses of lead in gasoline and paint, and from industrial processes. The purpose of this event is to increase your awareness about the hazards of lead in soil and provide information on how to avoid exposures to lead while gardening or playing in your yard.

How does the soilSHOP work?
Community members are encouraged to collect a sample of soil from their home or neighborhood and bring it to the soilSHOP event to be screened (measured) for lead using a hand-held device that estimates the amount of lead in soil. Participants will receive 1 to 3 soil lead screening results, have an opportunity to talk with health and environmental partners about their results, and be offered additional information on:

- ways to reduce lead exposure while gardening
- how to prevent lead poisoning in and around the home and neighborhood
- how to get additional soil testing done
- where you can go to get tested if you are concerned about lead exposure

What are the limitations of the results from the soilSHOP screening?
Due to time and resource limitations at the event, participants will generally receive soil lead screening results for the samples provided (up to 3 samples). These results will likely not be representative of soil for the entire property where the samples were collected. The screening method used during the soilSHOP event may be less accurate compared to laboratory testing for lead in soil. The soil screening method will provide participants with a measurement of the amount of lead in a soil sample, expressed as parts per million by weight (milligrams lead per kilogram soil). The soil screening method does not provide information about the source or sources of lead in soil. Soil samples will be screened for lead only during the soilSHOP. There is a possibility that other contaminants may be present in the soil. soilSHOP partners will provide information on where participants may seek further laboratory testing to confirm their lead screening result and to have soil tested for additional parameters.

Why are lead screening and interpretation of screening results important?
Given the long history of industrial use, historically high levels of lead-based paint in older buildings, and the use of leaded gasoline in vehicles until the late 1980s, lead is often found in urban soil. Therefore, most of the soil samples brought to the soilSHOP are expected to contain some amount of lead. soilSHOP partners will help to explain what the soil screening result means and how it compares to other soil tested in the area and across the State. They will also explain ways to prevent or reduce exposure to lead in soil.

Who is the most at risk from lead in soil and why?
Children under the age of 6 years are most at risk. Young children spend a lot of time on the ground and tend to put their hands or other objects (which may be contaminated with lead dust) into their mouths. Children are also at greater risk because their brains are growing quickly and lead can hurt the brain's growth, hearing and speech development, overall growth and development, and make it hard to pay attention and learn. Even a small amount of lead can harm a young, growing child. Pregnant women are also at risk since lead can cause high blood pressure, and can be passed from a mother to her unborn baby. Many homes built before 1978 still contain lead-based paint and lead dust from peeling paint. This lead can land on soil around the outside of the home or inside homes on window sills, floors, and toys. All these factors increase the risk of lead poisoning among children.

What are next steps for gardeners and homeowners who are concerned about their soil lead results?
If you are concerned about your soil lead results or possible other sources of lead in your yard or garden, you may want to consider steps to reduce potential exposure, especially if you have young children. Simple steps can include:

- minimizing a child's direct contact with bare soil by covering the soil with grass or adding clean soil or compost;
- practicing good hygiene like washing hands after touching the soil and avoiding tracking soil into your home; and
- ensuring that your child's blood has been tested for lead.

If you do not have a doctor or health insurance, information will be available at the event about where you can go locally to get a blood lead test for you or your child, to sign-up for health insurance, and to find a doctor. Additional information on other ways to reduce potential exposure to lead in soil will be available from soilSHOP partners.

The above is modified and updated from information developed by ATSDR and EPA to support the 2011 EPA Brownfields Soil Kitchen. Revised May 2016.