



Safe Urban Gardening Initiative

Our research has found elevated levels of lead in soils in Indianapolis, with a bulls-eye pattern of lead being highest in the downtown core and decreasing outward to nearly normal levels by the I-465 loop. This high soil lead correlates with high lead exposure in children particularly, where lead is extremely harmful to their brain and neurological systems. The lead in soil is the legacy of 100+ years of home and industrial uses of lead (leaded gasoline, lead-based paints, lead smelters), and it is important to reduce exposure to this soil-borne lead.

In an effort to support sustainable and safe urban gardening, even on plots with this legacy of lead, the Center for Urban Health at IUPUI has initiated the **Safe Urban Gardening Initiative**, funded by the Indianapolis Foundation, a CICF affiliate. Our goal is to support and enhance urban gardening by providing a resource for the testing of garden soils, as well as guidelines for gardening that are specific to your specific property. In return, we are able to use you, the urban gardener, as a partner in research—the results for lead and other metals that we determined are included in our expanding database on soil lead values in Indianapolis, potentially providing new insights into how to reduce lead exposure to children.

By following some simple instructions, you can partner with us in improving the health and safety and sustainability of Indianapolis, while at the same time ensuring the health and safety of your own family.

To participate in this program, just follow the instructions below—we look forward to receiving your dirt!

Items you will need:

- 1) Ziploc bags (1 quart or less)
- 2) Permanent marker
- 3) Trowel or scoop

What you should do:

- 1) Take 5 samples from in and around your planting area
 1. Identify three sites either where your beds are now or where you plan to plant.
 2. Also identify one site in the front yard or near the street.

3. Finally, identify one site near your house, preferably below the dripline of your gutter.
 4. At each site, use the trowel or scoop to scrape up soil down to a depth of ~4 inches.
 5. Put a handful of this soil sample in a Ziploc bag and seal it. Don't worry about grass or sticks or rocks—we will remove these.
 6. Label the bags with permanent marker (Sharpie preferred), starting with the name, street address and zipcode. Additionally, label the street bag as street, the house bag as dripline, and the other garden soil bags in a way that makes sense to you (i.e., north, south, or tomatoes, cukes, whatever works)
- 2) Put all sealed sample bags in another bag—1 gallon Ziploc would be ideal, but could also use a plastic grocery bag. Label the bag again with name, address, and email address (if you have one).
 - 3) Place in a mailing container (a simple mailing envelope from the post office will do), and send to:

Safe Urban Gardening Initiative
c/o Dr. Gabriel Filippelli
Department of Earth Sciences
Indiana University - Purdue University Indianapolis (IUPUI)
723 W. Michigan St.
Indianapolis, IN 46202

What we will do:

- 1) We will log in your samples, sieve to remove large debris, analyze the sample for lead content
- 2) We will return the results to you, along with a recommendation table focused on your garden soils.

Above all, don't worry about the sampling—I am training you to be environmental sciences, and it really won't matter if you dig down to 3 inches, or 5, what type of trowel or scoop you use, what brand of bag you use. Lead really doesn't go away because of its geochemistry, so it is nearly impossible to take a "bad" lead sample. I will make sure to get you good results from my end. If you have any questions about the process, contact me by email (gfilippe@iupui.edu).