

## WHAT IS LEAD?

Lead is a naturally occurring metal that can be hazardous to human health, especially for children under 6 years of age



## WHY IS LEAD A CONCERN?

- 1 in 20 children in Detroit is lead poisoned
- Children with blood lead levels higher than 10 µg/dL\* have lead poisoning
- Lead poisoning can cause learning and speech problems, hyperactivity and nerve damage that cannot easily be reversed and are likely to last a lifetime
- The effects of lead poisoning cannot always be seen
- A healthy diet high in vitamin C & D, calcium, zinc and iron can help reduce lead poisoning
- Children become lead poisoned by eating dust, dirt, and paint that contain lead
- All children under 6 should be tested yearly

## WHY IS THERE LEAD IN THE SOIL?

- Lead is found naturally in the soil in low amounts
- Most houses built before 1978 have leaded paint inside and outside
- Soil (mainly in large cities) may have high lead levels because of heavy industry and exhaust from leaded gas (banned in 1986)

\* µg/dL = microgram lead per deciliter of blood

## FOR MORE INFORMATION CONTACT:

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LEAD SAFE GARDENING

## WHERE CAN LEAD BE FOUND IN YOUR YARD?

- Lead may be found in the top 4 inches of soil around your yard
- Soil lead is found in highest amounts near the walls of buildings, especially if they were painted prior to 1978
- Soil lead levels can be higher close to roads

## WHERE IS LEAD IN THE GARDEN?

- Lead is not usually found in the fruit of the plant like cucumbers, tomatoes, or strawberries
- Lead is most often found in the root of plants like carrots, beets, turnips, potatoes
- Soil with lead can collect on leafy vegetables (collards, kale, turnip greens) especially those close to the ground

## WHEN SHOULD YOU BE WORRIED?

When your yard has a soil testing level of

- Below 100 ppm\*: safe range, no action needed
- 100-400 ppm\*: level of concern, use Best Gardening Practices
- 400-2,000 ppm\*: NO gardening before contacting a professional gardening group like **The Greening of Detroit**
- Above 2000 ppm\*: gardening of any kind is NOT recommended

\* ppm = Parts-Per-Million = 1 milligram Pb per kilogram soil (mg/kg) (Concentration of Lead from soil test)

## BEST GARDENING PRACTICES

### Yearly Upkeep

- Treat soil with lead free compost
- Till soil as deeply as possible (at least 4 in.)
- Plant your garden away from buildings, garages and the street
- Keeping your soil pH above 6.5 will help limit the amount of lead entering plants



### Before/During Gardening

- Wear gloves and wash up after gardening
- Keep a layer of mulch around plants to stop soil from splashing onto leaves during rain
- Do not eat or smoke while gardening
- Wet the soil before working in the garden to keep soil dust down
- Keep children under 6 years old out of gardens with soil lead levels above 100 ppm\* because they may eat dirt

## After Harvesting/Before Eating

- Wash all vegetables with soap and water or a vinegar water mixture (1 part vinegar to 9 parts water)
- Throw away outer leaves of leafy vegetables, and wash inner leaves well
- Peel and wash root vegetables well (if your soil lead levels are higher than 400 ppm\* you should not plant root crops before consulting a professional gardening group)

## CLEANING UP AFTER GARDENING

- Wash hands after working in the garden
- Remove shoes/boots before coming into your home
- Keep a separate set of clothes for gardening
- Wash gardening clothes separately

## GET YOUR SOIL TESTED!

The suggested local source is the professional gardening group **The Greening of Detroit** (see back)

[www.detroitagriculture.org](http://www.detroitagriculture.org)

### Other Resources

**Michigan Dept. of Community Health**  
[www.michigan.gov/mdch](http://www.michigan.gov/mdch)

**University of Massachusetts**  
Soil and Plant Tissue Testing Laboratory  
[www.umass.edu/soiltest](http://www.umass.edu/soiltest)

**Accurate Analytical testing LLC**  
[www.accurate-test.com](http://www.accurate-test.com)