

# LEAD SAFETY TOOL KIT

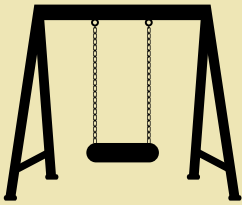
## What is lead?

Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. It has no special taste or smell. Lead can be found in all parts of our environment. Most of it came from human activities like mining, manufacturing, and the burning of fossil fuels. Because of health concerns, lead from gasoline, paints and ceramic products, caulking, and pipe solder has been dramatically reduced in recent years.

## What happens when lead enters the environment?

**Lead itself does not break down**, but lead compounds are changed by sunlight, air, and water. When released to the air from industry or burning of fossil fuels or water, it stays in air about 10 days. Most of the lead in soil comes from particles falling out of the air. City soils also contain lead from landfills and leaded paint. **Lead sticks to soil particles.** It does not move from soil to underground water or drinking water unless the water is acidic or "soft." It stays a long time in both soil and water.

## Where can lead be found?



OUTDOOR PLAY SPACES

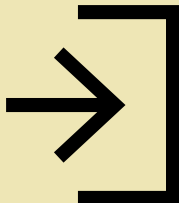


OUTDOOR PLAYING FIELDS

*\*The CDC found that turf fields that are old, that are used frequently, and that are exposed to the weather break down and may contain lead.\**



OPEN GRASSY AREAS



ENTRYWAYS  
FROM OUTSIDE





## *Effects of Lead*

Exposure to lead can seriously harm one health including:

- Tiredness
- Sleep problems
- Dizziness
- Irritability
- Nervousness
- Headaches,
- Difficulty concentrating
- Depression
- Forgetfulness
- Numbness
- Weakness
- Clumsiness
- Joint or muscle pain
- Vomiting
- Loss of appetite
- Stomach aches
- Constipation
- Metal taste in mouth
- and/or problems having health children.

## *Effects of Lead on Children*

Exposure to lead can seriously harm a child's health including:

- Damage to the brain and nervous system
- Slowed growth and development
- Learning and behavior problems
- Hearing and speech problems

Can also cause:

- Lower IQ
- Decreased ability to pay attention
- Underperformance in school

## *Who is at risk?*

- **Children under the age of 6 years old are at risk** because they are growing so rapidly and because they tend to put their hands or other objects, which may be contaminated with lead dust, into their mouths.
- **Children living at or below the poverty line who live in older housing are at greatest risk.** Additionally, children of some racial and ethnic groups and those living in older housing are disproportionately affected by lead.
- School buildings built before 1978 may contain lead base paint, and can be exposed through paint chips and dust.
- Agriculture/Farming communities

## How to Prevent Exposure

- Create barriers between living/play areas and lead sources. Until environmental clean-up is completed, you should clean and isolate all sources of lead.
- Close and lock doors to keep children away from chipping or peeling paint on walls.
- Regularly wash hands and toys. Hands and toys can become contaminated from dust or exterior soil. Both are known lead sources.
- Prevent children from playing in bare soil; if possible, provide them with sandboxes.
- Plant grass, pollinator and native plant gardens on areas of bare soil or cover the soil with grass seed, mulch, or wood chips, if possible.
- Until the bare soil is covered, move play areas away from bare soil.
- Plant bushes close to the school to keep children from playing in soil near school.
- Put doormats outside and inside all entryways and wipe your shoes before entering to avoid tracking contaminated soil into your house.

## Next Steps

- **If high levels of lead are found, contact the Indiana State Department of Health Laboratory at (317) 921-5500 for next steps.**
- Explore Center for Urban Health's guide to safe gardening in soils where lead is found.
  - <https://www.mapmyenvironment.com/wp-content/uploads/2019/10/Garden-Safe-Garden-Well.pdf>
- Plant plants that naturally reduce levels of lead.
  - i.e sunflowers, duckweed, mustard greens, wheat and other grains, sea pink thrift.
- Join Indy Thriving Schools Challenge for support in creating safe spaces for where lead is present.
- Follow steps from [Indy Thriving Schools Lead Screening Program](#) for safe collection of lead and dust samples.
- Send samples to:  
Thriving Schools Lead Screening Project Earth Charter  
c/o Tatjana Rebelle  
100 W 42nd St. Suite 220D, Indianapolis, IN 46208

*Disclosure: The intent of this lead safety screening toolkit is for educational purposes. This is only a screening for lead, further soil nutrient testing can be done through UMass-Amherst Soil and Plant Nutrient Testing Laboratory. It will be the schools responsibility for any further testing or costs. This is only screening, any further testing will need to be done with the Indiana State Department of Health.*

