## How to Reduce your Exposure to

# Lead

This handout gives tips for protecting yourself and your family from coming into contact with lead in soil.

#### What is Lead?

Lead is a naturally-occurring element found in soil at levels that vary depending on the region. Natural processes such as weathering, or human processes such as mining, agriculture or manufacturing, may result in exposure to levels of lead that are unsafe for human health. If you live in an area where the soil contains lead, the dust in your house may also contain lead. Lead in soil can be tracked into your house on shoes, clothes, pets and in other ways. Children are likely to eat dust and dirt that may contain lead while they are outside or in the home.

### How Can I Be Exposed?

Routes of exposure to lead in soil include:

- Ingestion (swallowing) of contaminated soil and dust (especially for children, who put objects and hands in their mouths).
- Ingestion of unwashed foods grown in contaminated soil.
- Inhalation (breathing) of soil particles or dust.
- Absorption of contaminants through the skin (low risk).

## Lead Poisoning in Children

Most children show no symptoms of lead poisoning. Signs of lead poisoning can often be mistaken for other illnesses.

#### Symptoms of Lead Poisoning, if they Occur, May Include:

- Abdominal pain
- Constipation
- Nausea and/or vomiting
- Irritability

#### **Lead Poisoning Can Lead to:**

- Damage to the brain and nervous system
- Behavioral problems
- Hearing problems
- Slowed or stunted growth
- Delayed or slow learning and development

Children younger than 6 years old and pregnant women are at the greatest risk for health effects. **The only way to know if your child has lead poisoning is to have a blood lead test.** If you think a child of any age has come in contact with lead, then ask your doctor to test that child's blood for lead.



#### **How Can I Reduce My Exposure to Lead?**

While no level of lead exposure is regarded as safe, soil-lead concentrations below 100 parts per million (ppm) is considered low risk, and concentrations exceeding 400 ppm are considered hazardous for gardening and play areas.

#### **Practice Safe Gardening**

- Build raised beds or use container gardens.
- Wash and peel all vegetables and root crops that are in direct contact with soil.
- Clean tools, gloves and shoes before bringing them indoors.
- Remove and place heavily soiled clothing in a bag before bringing them indoors, and wash them promptly.
- Wash hands after gardening (even if gloves are used).
- Watch small children to prevent them from ingesting soil via hand-tomouth contact.

#### **Reduce Dust in Your Home**

- Wash children's hands and feet after they have been playing outside.
- Vacuum carpets and rugs before mopping non-carpeted areas. If possible, use a vacuum with a high-efficiency particulate air (HEPA) filter.
- Use a wet mop on hard floors and clean window sills with wet rags regularly.
- Be aware of other possible lead sources, like lead paint in older homes.
- Bathe pets that go outside regularly.

#### **Eat Healthy Foods**

Feed your child healthy foods with calcium, iron, and vitamin C. These foods may help keep lead out of the body. Feed your child three healthy meals a day and at least two healthy snacks. Children with empty stomachs get more lead into their bodies than children with full stomachs.

- Calcium is in milk, yogurt, cheese, and green leafy vegetables like spinach.
- Iron is in lean red meats, beans, peanut butter, and cereals.
- Vitamin C is in oranges, green and red peppers, and juice.

If you believe your child has been exposed to lead, ask your doctor to test your children's blood for lead.

#### For more information, contact:

Environmental Health
Chemical Hazards Program
www.dph.georgia.gov/chemical-hazards
(404) 657-6534

Georgia Healthy Homes and Lead Poisoning Prevention Program www.dph.georgia.gov/healthy-homes-and-lead-poisoning-prevention

#### To read more about the health effects of lead, visit:

Agency for Toxic Substances and Disease Registry www.atsdr.cdc.gov/toxfaqs/index.asp



# Do not let children play in dirt that contains high amounts of lead.

- Have children play on grass or in areas covered with leadfree mulch, wood chips or sand.
- Keep children from playing in bare dirt.
- Cover bare dirt with grass, bushes or 4 to 6 inches of lead-free wood chips, mulch, soil or sand.