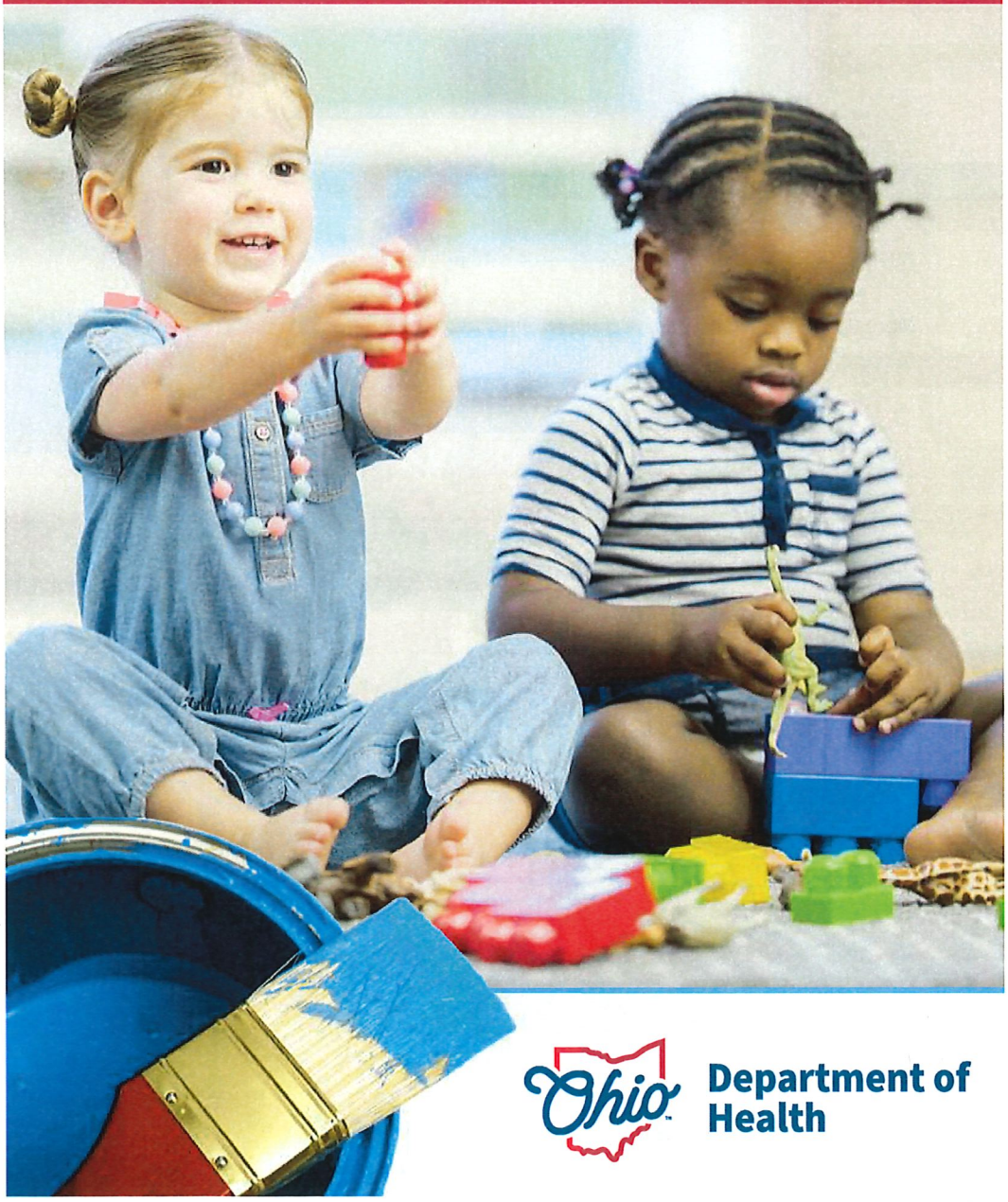
PREVENTING
Childhood Lead Poisoning



Ohio Department of Health

Lead was used in house paint until 1978.

Any house built before 1978 could have lead paint.

More than 67% of all housing units in Ohio were built before 1980 and are likely to contain some lead-based paint on interior and/or exterior surfaces.

Table of Content

Keep Your Child Safe From Lead Poisoning

Most children are exposed to lead in their homes. Even a small amount of lead dust can impact your child.

Your child may not look or act sick. Problems from lead may not show up until later, but can have long-term effects such as:

- Lower attention span which can impact learning.
- Behavioral problems including hyperactivity.
- Hearing loss.

Children under age 3 are at the greatest risk of lead exposure because they:

- Are still rapidly growing.
- Absorb lead more easily than adults.
- Are more likely to put their hands or objects in their mouths.

Lead enters the body when children:

- Put their hands or other items with lead dust in their mouths.
- Breathe in lead dust.

The most common lead hazards are:

- Chipping and peeling paint and dust in homes built before 1978.
- Lead dust created during home remodeling or from use of windows and doors.

Keep Your Child Safe From Lead Poisoning (continued)

Other places where lead is found:

- Soil or dirt.
- Water (uncommon in public water).
- Children's toys and jewelry.
- Jobs such as construction or manufacturing, or hobbies such as hunting and fishing.
- Foods and candies made outside of the U.S.
- Folk remedies and imported cosmetics (such as kohl, greta, surma, and azarcon).
- Ceramics, crystal, and stained glass.
- Older painted furniture.

Other steps you can take to keep your child safe include:

- Leaving shoes at the door to avoid spreading any lead dust from outside or your workplace.
- Keeping regularly scheduled doctors' appointments.
- Showering and changing clothes before touching your child if your job exposes you to lead.

Why Your Child Needs a Lead Test

Most children have no symptoms or may have symptoms that are mistaken for other illnesses.

Possible symptoms include:

- Stomachaches.
- Headaches.
- Tiredness.
- Low iron levels.

When is your child at risk?

Your child is at risk if you answer yes to any of these questions:

1. Is your child on Medicaid?
2. Does your child live in a high-risk ZIP codes?
3. Does your child live in or regularly visit a home, child care facility, or school built before 1950?
4. Does your child live in or regularly visit a home, child care facility, or school built before 1978 that has deteriorated paint?
5. Does your child live in or regularly visit a home built before 1978 with recent, ongoing, or planned renovation/remodeling?
6. Does your child have a sibling or playmate that has or did have lead exposure?
7. Does your child frequently come into contact with an adult who has a hobby or works with lead?
   Examples are construction, welding, pottery, painting, and casting ammunition.
8. Does your child live near an active or former lead smelter, battery recycling plant, or other industry known to generate airborne lead dust?

Why Your Child Needs a Lead Test (continued)

There is no safe level of lead in a child's blood.

Ask your doctor for a blood test! Only a blood test will let you know if your child is exposed to lead.

- Current law requires that all children who are on Medicaid be tested for lead at 1 and 2 years of age.
- It is also required that all children who live in a high-risk ZIP code be tested for lead at 1 and 2 years of age. To find if you live in a high-risk ZIP code, contact your local health department or go to www.odh.ohio.gov/lead.
- Other risk factors (previous page) may indicate a need for a blood lead test.
- Lead levels should be confirmed with a venous sample test when greater or equal to 3.5 µg/dL and the first test is from a capillary sample (finger/heel stick).

Our child had a blood lead test

Date of blood lead test _____ Level _____

To be confirmed on/by _____ Level _____

Retest on/by _____ Level _____

What does it mean?

- **<3.5 micrograms per deciliter (µg/dL):** Any exposure to lead can be harmful to a child. Even if your child's blood lead level is less than <3.5 µg/dL, your child could be exposed to lead somewhere in his/her environment. Call your local health department or the Ohio Department of Health for information about possible sources of lead.

Why Your Child Needs a Lead Test (continued)

- **3.5 - <10 µg/dL:** At levels of 3.5 µg/dL or higher, there are many things you can do to reduce or keep the lead level from increasing. These include frequently washing hands, wet cleaning all surfaces, and providing nutritious meals. Lead can cause permanent damage and your child's lead level is likely to increase unless you take steps to reduce his/her exposure. Health department staff will help determine the possible sources of lead exposure.

- **10 - <45 µg/dL:** If your child has a confirmed blood lead level of 10 µg/dL or higher, you will be contacted by your local or state childhood lead poisoning prevention program. A lead risk assessor will schedule a public health lead investigation. An inspection may take place in your home or somewhere else where your child spends time (e.g., child care center, babysitter's or relative's home). They will assist you in determining the source of lead exposure and provide prevention strategies. Local lead case managers are available to answer your questions either by phone or during a home visit.

- **≥45 µg/dL:** If your child has a confirmed blood lead level of 45 µg/dL or higher, this requires immediate medical intervention. Consult your physician immediately and follow his/her instructions. A lead risk assessor will contact you to schedule a public health lead investigation as soon as possible. Follow all previous guidance for lower lead levels.

Whole House Cleaning to Control for Lead Dust

Supply checklist:

- ☐ Plastic or rubber gloves.
- ☐ Plastic trash bags.
- ☐ Lint-free disposable rags.
- ☐ Spray bottle filled with water.
- ☐ Two plastic buckets or double-sided bucket.
- ☐ Mop with washable or disposable cloths.
- ☐ Water and detergent.
- ☐ Professional HEPA vacuum. Many household vacuums will spread dust into the air. You can contact your local health department for more information on the HEPA vacuum free loaner program or call 614 - 466 -1450.

Prepare the area:

Wearing gloves, pick up large paint chips found on floors, porches, and other areas around the home.

- Place the chips in a plastic bag.
- Remove smaller paint chips by spraying them with water before sweeping them up with a broom. Dry sweeping will spread lead dust around.
- Seal the plastic bag.
- Place the bag in the garbage.

Whole House Cleaning to Control for Lead Dust (continued)

Wash all surfaces with detergent:

- Fill one bucket with water and detergent.
- Fill the other bucket with water only.
- Wearing gloves, clean from the ceiling to the floor with rags. Start at the farthest corner of the room and work toward the door.
- Change detergent water and rags frequently.
- Pour used water and detergent down the toilet. Avoid throwing in sinks, bathtubs, and yards.
- Mop one area in a room one section at a time by using detergent followed by a fresh rinse water.
- Change both rinse and detergent water often.
- Change mop cloth with each room change.

Carpets and vacuuming:

- Use a professional HEPA vacuum. (Other vacuums may distribute lead dust around the home.)
- Clean from top to bottom, vacuum furniture and drapes first.
- Slowly vacuum carpeting and area rugs.
- Flip rugs over and vacuum the other side as well.
- Throw rugs may be separately washed in a washing machine.
- Change vacuum cleaner bags/canisters outside the home.

Whole House Cleaning to Control for Lead Dust (continued)

If possible, remove carpeting. Hard floor surfaces are easier to keep clean.

Pets can track in lead from outside in the yard or on the porch. It can be on their fur and paws. Wipe paws and fur before your pets enter the house.

If unable to complete a whole house cleaning, start with the areas in rooms where children spend time. Some of the most common areas to find lead dust are around windows and doors.

Cleaning up lead dust is a short-term safety method. Careful cleaning of areas that contain lead is very important. Lead dust collects on window sills, floors, walls, and toys.

Removing the source of the lead dust is needed to keep your family safe from lead dangers.

Lead-Safe Remodeling

Test your house for lead before

- Removing paint.
- Remodeling.

If your home, a relative's home, or a child care location was built before 1978 and is being renovated or remodeled, do not let your child play near the dust, paint chips, or any debris from the construction. Lead paint was most likely used in the building, and disturbing the paint can cause lead exposure.

When remodeling:

- Get expert help. Call the Ohio Department of Health for help finding a licensed individual or visit www.odh.ohio.gov/lead for more information.
- Avoid dry sanding paint.
- Avoid using a heat gun to remove old lead paint.
- Use baby gates or shut doors to keep children away from the area.
- Remove all furniture, area rugs, curtains, food, clothing, and other household items until cleanup is complete.
- Items that cannot be removed from the work area should be tightly wrapped with plastic sheeting and sealed with tape.
- Cover floors with plastic sheeting.

Lead-Safe Remodeling (continued)

- If working on a larger job, cover entrances and exits with plastic sheeting and create an airlock.
- Turn off forced-air heating and air conditioning systems. Cover vents with plastic sheeting and tape the sheeting in place with tape.
- Close all windows in the work area.
- Spray water on lead-painted surfaces to keep dust from spreading.
- Use wet cleaning methods (pages 10 and 11) to thoroughly clean area after work is completed.

Help Reduce Lead With a Healthy Diet

Foods high in iron, calcium, and vitamin C are very important to children. The body can mistake lead for any of these nutrients. Children who do not have enough of these nutrients will absorb lead more easily than children who do.

Iron

- Iron-deficient children or children with anemia are more at risk, and can absorb up to 50% more lead.
- Most cereals and bread have added iron in them (fortified).
- Lean meat, green leafy vegetables, oatmeal, prunes, and raisins are excellent sources of iron.

Calcium

- Eating foods rich in calcium can help keep lead from entering the bloodstream.
- Milk, cheese, broccoli, spinach, yogurt, kale, and turnip greens are all good sources of calcium.

Vitamin C

- Vitamin C may act as a protective agent against lead.
- Oranges, grapefruits, tomatoes, potatoes, broccoli, and berries are excellent sources of Vitamin C.

Help Reduce Lead With a Healthy Diet (continued)

To make sure your child practices good nutritional habits, the following are recommended:

- Do not skip meals; empty stomachs more easily absorb lead.
- Wash your child's hands well and often, especially before eating.
- Limit the amount of fat and sugar in your child's diet.
- Offer fruits and vegetables instead of chips and candy.
- Offer healthy snacks between meals.
- Wash fresh food properly.
- Do not store or heat food in containers not intended for cooking, such as cans or glazed pottery.
- Do not allow your child to eat food that has dropped on the floor.

Keep in mind that good nutrition cannot fully prevent exposure to lead, but is very important to your child's overall health and wellness. For further information on preparing nutritious meals and snacks, please visit www.myplate.gov.

Lead and Pregnancy

You and your unborn baby can both be harmed by lead. Your child could be affected if you are exposed to lead while you are pregnant. Lead can cause your baby to be born too small and too soon. You could also have a higher than normal chance of having a miscarriage.

Tips for a healthy pregnancy

- Eat healthy, well-balanced meals rich in iron and calcium.
- Keep regular prenatal doctor visits.
- Protect yourself if your job exposes you to lead.
- Never put non-food items in your mouth. Sometimes pregnant women may have an urge to eat things that are not food. Some examples include corn starch, crushed pottery, and dirt. If you have the urge to eat non-food items, discuss this with your doctor.
- Pregnant women must NOT clean up lead dust. Also keep other children away from the cleaning area.
- If you are pregnant, or thinking of becoming pregnant, talk to your doctor and learn how to prevent lead exposure.

Prenatal Risk Assessment for Lead

If you answer yes to questions 1-7, blood lead testing is recommended.

1. Do you or others who live with you work with lead at your job? (See list below of jobs that may have lead exposure.)

- Ammunition/explosives production.
- Bridge, tunnel and elevated highway/subway construction.
- Glass recycling, stained glass and glass manufacturing.
- Manufacturing and installation of plumbing components.
- Occupations using firearms.
- Rubber manufacturing.
- Work at automotive repair shops.
- Cable/wire stripping, splicing, or production.
- Lead abatement.
- Manufacturing of industrial machinery and equipment.
- Plastics manufacturing.
- Sandblasting, sanding, scraping, burning or disturbing lead paint.
- Battery manufacturing and recycling.
- Ceramic manufacturing.
- Lead production or smelting.
- Work at metal scrap yards and other recycling.
- Pottery.
- Use of lead-based paints.
- Brass, bronze, copper, or lead.
- Machining or grinding lead alloys.

Prenatal Risk Assessment for Lead (continued)

- Firing range work.
- Machining or grinding lead alloys.
- Work with motor parts and accessories.
- Production and use of chemical preparations.
- Welding or torch-cutting painted metal.

2. Do you or others who live with you have any hobbies or activities that involve lead? (See list below of activities that may have lead exposure.)

- Making stained glass or painting on stained glass.
- Copper enameling.
- Bronze casting.
- Making pottery and ceramic ware with lead glazes and paints.
- Casting ammunition, fishing weights, or lead figurines.
- Collecting, painting, or playing games with lead figurines.
- Jewelry making with lead solder.
- Electronics with lead solder.
- Furniture refinishing.
- Glassblowing with leaded glass.
- Printmaking and other fine arts.
- Liquor distillation.
- Hunting and target shooting.

Prenatal Risk Assessment for Lead (continued)

3. Do you have children in your home with lead exposure?
4. Do you have a history of lead exposure?
5. Have you in the past five years, or are you currently, fixing a home built before 1978 for your job, hobby, or personal use?
6. Sometimes pregnant women have the urge to eat things that are not food, such as clay, soil, plaster, or paint chips. Do you ever eat or chew on non-food items?
7. Were you born or have you spent any time outside of the United States?

If you answered YES to any question 1-7, a blood lead test is recommended.

8. To your knowledge, has your home been tested for lead in the water, and if so, were you told that the level is high (≥15 parts per billion)?
9. Do you use any traditional folk remedies or cosmetics that are not sold in a regular drug store or are homemade, and may contain lead? For example: kohl, kajal, surma, greta, azarcon, bali goli, payloo-ah, and ghazard.
10. Do you use homemade pottery or leaded crystal for eating or drinking?
11. Do you live in, or regularly visit, a house built before 1978 that either has chipped or peeling paint, or has been remodeled or renovated in the past five years?

If you answered YES to any questions 8-11, risk reduction counseling/ education is recommended.

Online Brochures and Resources for Childhood Lead Poisoning

Ohio Department of Health (ODH)
www.odh.ohio.gov (Search keyword "lead poisoning".)
1-877-LEAD SAFE

Centers for Disease Control and Prevention (CDC)
www.cdc.gov/nceh

American Academy of Pediatrics
aap.org (Search keyword "lead poisoning".)

Ohio Department of Medicaid
medicaid.ohio.gov

National Center for Healthy Housing
www.healthyhousing.org

U.S. Department of Housing and Urban Development (HUD)
www.hud.gov/program_offices/healthy_homes/leadinfo

U.S. Environmental Protection Agency (EPA)
www.epa.gov/lead