Lead poisoning in children

Lead poisoning is a serious health problem affecting thousands of children each year. Children younger than 6 are more likely to get lead poisoning than any other age group. Lead can also be passed from mother to baby during pregnancy.

The symptoms of lead poisoning can be hard to recognize, but its long-term effects can be very serious. It can slow a child’s growth and development and cause brain damage, kidney disease, hearing problems, seizures and even death. Lead poisoning can be treated, but it’s best to prevent it.

Causes of lead poisoning

Ingesting anything with too much lead in it can contribute to lead poisoning. One of the most common sources of lead poisoning is paint chips from homes built before 1978, when lead-based paint was used. Children are poisoned by consuming paint chips, breathing in household dust containing tiny lead paint particles or putting dirty fingers and other things with lead dust on them in their mouths.

Tap water from homes with plumbing fixtures containing lead can also be hazardous. Never use hot tap water for drinking or cooking because the heat causes lead in the piping to leach into the water. Use cold tap water instead.

Lead may also be found in soil. Further, some imported ceramics, crystal, earthenware or pottery dishes, home remedies, cosmetics and food cans may contain lead.

Symptoms of child lead poisoning

Most of the time there aren’t any symptoms. Warning signs, such as headaches, stomach aches, tiredness, paleness, crankiness or a change in appetite, could easily be mistaken for other common childhood ailments. The most common test for lead is a blood test.
**Possible sources of lead in and around the home**

- Lead-based paint
- Lead pipes and plumbing fixtures
- Car batteries, radiators
- Soil contaminated by lead paint chips
- Food grown in gardens with contaminated soil
- Household dust from lead paint removal, renovation
- Colored inks used in newspapers and magazines
- Fumes from burning painted wood and from some printed materials
- Hobbies that involve lead, such as making stained glass, lead sinkers or bullets
- Firearms with lead bullets
- Lead-glazed ceramics, china, leaded crystal glassware
- Older furniture, such as cribs, as well as some toys coated with lead paint or lead-based stains; inexpensive children's jewelry, non-glossy mini blinds from other countries
- Some folk remedies, ayurvedic remedies and cosmetics
- Imported candies or foods, especially those from Mexico, containing chili or tamarind; imported foods in cans sealed with lead solder
- Soil and air contaminated by leaded-gas auto emissions and pollution from lead-using industries

**Testing**

New York State requires health care providers to test all children for lead with a blood test at age 1 and again at age 2. Up to age 6, health care providers must ask parents about any contact their child might have had with lead and test again, if necessary. Inquire about the test and the results.

**Treatment**

Your doctor will decide what type of treatment is needed. Your child may be treated with iron, which helps prevent lead from being absorbed by the body. More tests may be ordered so the doctor can assess organ damage, if any. Your child may be treated with medication to rid the body of lead, and this may have to be done in a hospital.

The sources of lead must also be removed. Someone from your local health department will visit your home and help you find the source. Your child will need follow-up tests to make sure the lead is gone.

**Tips to prevent lead poisoning**

- Children up to 6 years old should be tested regularly.
- Wash your hands and your child's hands frequently to rinse off any dust or dirt which may contain lead.
- Serve meals high in iron, calcium and vitamin C, such as meat, broccoli, spinach, cheese, milk and citrus fruits, to help prevent lead from being absorbed into the body.
- Wet mop dusty surfaces regularly.
- Remove or cover contaminated soil.
- Have tap water tested for lead content.
- Use only cold tap water for drinking and cooking because lead leaches into hot water.

If you work with lead on the job, don't bring it home:

- Shower and change clothes before going home.
- Wash work clothes separately from other laundry.

**Lead paint removal**

If possible, consider hiring or consulting with a professional who knows about lead hazards in the home. Lead paint in poor condition can be removed or covered with sheetrock, paneling or vinyl wallpaper. Be sure to include windowsills, woodwork and all areas within a child's reach. Don't paint over old paint – the lead will still be under the layer of new paint.

**Safety tips for removal**

- Use drop cloths for easy cleanup.
- Wear a tight-fitting mask over your mouth and nose to avoid breathing in dust or fumes; wear goggles, gloves and hair and shoe covers.
- Keep a window open for fresh air.
- Do not use sanders, heat guns or open flames to remove lead paint because the dust and fumes are poisonous.
- The safest way to remove paint is to scrape it off, which limits the dust and makes cleanup easier.
- Clean the work area every day with a high-phosphate cleaner.
- Keep children, nursing and pregnant women, and pets out of the work area.
- Wash your hands before eating and do not smoke or eat in the work area.

**Free testing of your home’s water**

The Free Lead Testing Pilot Program will provide NYS residents who are served by either a private well or public water system with an opportunity to have their residential drinking water tested for free.

Visit the NYS Department of Health website at [www.health.ny.gov/environmental/water/drinking/lead/free_lead_testing_pilot_program](http://www.health.ny.gov/environmental/water/drinking/lead/free_lead_testing_pilot_program) and click on the link to fill out a short form and email it to the Bureau of Water Supply Protection. You can also email FreeWaterTesting@health.ny.gov directly or call the State Health Department at 518-402-7650 to request a free drinking water lead test kit.

Source: United States Environmental Protection Agency (epa.gov), New York State Department of Health (health.ny.gov)