

Frequently Asked Questions (FAQs)
Childhood Lead Poisoning
Wisconsin Environmental Public Health Tracking
November 2008

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What is Lead?

Lead is a naturally occurring toxic metal. It may be found in its pure form or in combination with other minerals. Lead has no nutritional value, but is valuable in manufacturing. It was used in house paint until it was banned in 1978. When it enters the body it can cause lead poisoning.

What is lead poisoning?

Lead poisoning is commonly measured through a blood test. The results are measured in micrograms per deciliter (mcg/dL). Wisconsin statute (Wis. Stats 254.11[9]) defines lead poisoning in a child as a blood lead level of 10 or more mcg/dL. However, there is no safe level of lead in the human body. Even very low levels of exposure can cause adverse health effects.

Why do the data focus on lead poisoning in children?

Children are more vulnerable to lead poisoning than adults. The Centers for Disease Control & Prevention (CDC) identifies lead as the number one environmental health threat to young children. Lead poisoning in children is preventable.

The focus is further refined to be on children younger than six-years-old. The reason for focusing on this age group is due to:

- Their growing bodies absorb more lead than adults,
- Their brain and nervous system are more sensitive to the damaging effects of lead. As their brain is creating connections and the nervous system is forming, lead poisoning can interrupt this process, and
- Children are crawling and putting objects in their mouths. They can come into contact with any lead that is present in their environment. This includes lead dust on toys or on the floor.

What is the relationship between lead poisoning and environmental health?

The Wisconsin Environmental Public Health Tracking program (WI EPHT) tracks childhood lead poisoning because it's a preventable threat to children. Previous steps have been taken to reduce lead poisonings by

banning its use in products, e.g., gasoline. Unfortunately, there are still approximately 310,000 U.S. children aged 1-5 years who are considered lead poisoned.

How does lead poisoning occur in children?

Lead was used in house paint for many years. Even though lead-based paint was banned from homes in 1978, it is still the main [source](#) for lead poisoning in children. Lead-based paint is usually not a hazard if it is in good condition, meaning it is not cracked or chipped, and it is not on an impact or friction surface, like a window. As the lead-based paint in these homes deteriorates or these homes are remodeled, the dust created can enter the body by:

- Breathing in the lead dust,
- Swallowing it by putting their hands or other objects covered with lead dust in their mouths, or
- Eating paint chips or soil that contains lead.

Twenty-four million housing units in the United States have peeling or chipping lead-based paint and high levels of lead-contaminated house dust. More than 4 million of these homes are occupied by young children. There are approximately 400,000 housing units in WI with lead paint hazards.

What are the health effects?

The health effects associated with lead are the same whether it enters the body through breathing or swallowing. Lead can affect almost every organ and system in the body. The main target for lead toxicity is the nervous system.

Lead poisoning can cause:

- Nervous system and kidney damage,
- Learning disabilities, attention deficit disorder and decreased intelligence,
- Speech, language, and behavioral problems,
- Poor muscle coordination and decreased muscle and bone growth, and
- At very high levels, seizures, coma, and even death.

Lead poisoning often occurs with no obvious symptoms, and therefore frequently goes unrecognized.

How can I tell if my child is lead poisoned?

The only way to know if your child is lead poisoned is to have your child tested. If your child is [at-risk](#) or you are concerned about their exposure to lead, contact your doctor or local health department.

Lead poisoning often occurs with no obvious symptoms and it frequently goes unrecognized until it is too late and damage has been done. Most symptoms such as speech, language, behavioral problems, and learning disabilities would not be recognized until school age and at that point the damage may be irreversible.

What are the sources for lead?

Lead may be found in its pure form or in combination with other minerals. It is valuable in manufacturing and is used with other metal alloys.

- Lead-based paint in homes built before 1978 is the major source for lead poisoning in children. If you live in or regularly visit homes built before 1978, you may be at risk for lead poisoning. This includes daycare, grandparents or other family members' homes.
- Drinking water (lead pipes, solder, brass fixtures, and valves can all leach lead).
- Home health remedies (azarcon and greta, which are used for upset stomach or indigestion; pay-loo-ah, which is used for rash or fever).
- Toys
- Candy
- Working with lead outside of the home can result in it appearing in the home. Jobs or hobbies, such as, recycling or making automobile batteries, painting, radiator repair, making stained-glass windows, hunting, fishing or target shooting, can produce lead dust. The dust can cling to your body and clothing.

Visit the list of current [recalls](#) for lead products from the Wisconsin Childhood Lead Poisoning Prevention Program.

How do you treat a child for lead poisoning?

The primary treatment is removing the source of the lead poisoning. Chelation therapy, a way to remove heavy metals from the body, is also used with children who have blood lead levels >45 mcg/dL. Make sure to follow the recommendations given by your health care provider.

How can I prevent my child from being lead poisoned?

The main source for lead poisoning in children is from lead-based paint in homes. There are steps that can be taken to ensure your child is not lead poisoned. Remember, lead-based paint is usually not a hazard if it is in good condition, meaning it is not cracked or chipped, and it is not on an impact or friction surface, like a window.

- In homes built before 1978, do the following:
 - If paint is deteriorating or on a friction or impact surface, test the paint and dust from your home. Contact your state or local health department to learn more on ways to test and how to safely correct any lead paint or dust hazards that are found.
 - If you plan to remodel your home, assume that the paint has lead unless tests show otherwise and use proper precautions.
 - Damp-mop floors, damp-wipe surfaces, and frequently wash a child's hands, pacifiers, and toys to reduce exposure to lead.
 - If your work involves remodeling buildings built before 1978 or you have hobbies that use lead-based products, take steps to decrease your exposure to lead. For example, showering and changing clothes after finishing the task will decrease the chance of exposing your child to lead.
- Use only cold tap water for drinking, cooking, and making baby formula. Hot water is more likely to contain higher levels of lead, and most of the lead in household water usually comes from the plumbing in your house, not from the local water supply.
- Avoid using home remedies (such as azarcon, greta, pay-loo-ah), cosmetics (such as kohl, alkohol), and other products that contact lead. A list of [recalled products](#) are available at the Wisconsin Childhood Lead Poisoning Prevention Program website.

What children are at-risk for lead poisoning?

In Wisconsin, children with one or more of the following characteristics are at the highest risk for lead poisoning:

- Two years of age,
- Living or frequently visiting a home built before 1950,
- [Enrolled](#) in Medicaid or the Supplemental Food Program for Women, Infants and Children (WIC),
- African American.

How does EPHT help prevent lead poisoning?

Environmental Public Health Tracking program (EPHT) helps prevent lead poisoning by:

- Identifying children at risk to help local health departments target testing and resources;
- Providing data to the public to help them learn about the environment and health in their communities;
- Providing environmental public health staff easily accessible integrated environmental health data in a confidential manner;
- Providing policy makers the information and data to guide their public health decisions; and
- Monitoring progress towards eliminating childhood lead poisoning.

What are the benefits of tracking childhood lead poisoning?

Tracking childhood lead poisoning will help identify:

- Lead testing and poisoning rate changes over time,
- Seasonal changes,
- Geographic differences,
- Differences in lead testing and poisoning by age, gender, and race/ethnicity,
- Populations in need of targeted interventions.

How are we measuring childhood lead poisoning on the website?

The Tracking Network includes the following information about childhood lead poisoning:

- Annual number of children under 6 tested for lead poisoning,
- Annual number of children under 6 testing positive for lead poisoning,
- Annual percent of children under 6 who were poisoned by lead among those who were tested for lead.

How can tracking childhood lead poisoning improve public health?

The development of standardized measures for childhood lead poisoning among residents in each state will inform multiple users at the national, state, and local levels. These measures will allow for monitoring of trends over time and have the potential to identify high risk groups not reflected in current national data. These data may also inform childhood lead poisoning prevention advocates, aid in identifying lead poisoned children, and assist program planning and evaluation efforts.

What are the data limitations that impact how to interpret trends?

The Wisconsin Childhood Lead Poisoning Prevention Program regularly collects and analyzes data on childhood lead poisoning and provides statistics to local health departments and the general public. The data collected is based on the number of children tested not based on all children residing in the state or local community.

Where can I go for more information?

The following resources are available:

- Wisconsin Childhood Lead Poisoning Prevention Program
<http://dhs.wisconsin.gov/lead/index.htm>
- CDC Lead Poisoning Prevention Program
<http://www.cdc.gov/nceh/lead/>
- Environmental Protection Agency
<http://www.epa.gov/lead/>
- US Department of Housing and Urban Development
<http://www.hud.gov/offices/lead/>
- Agency for Toxic Substances and Disease Registry
<http://www.atsdr.cdc.gov/tfacts13.html>
- National Institute of Environmental Health Sciences
<http://www.niehs.nih.gov/health/topics/agents/lead/index.cfm>
- The Alliance for Healthy Homes
<http://www.afhh.org/index.htm>
- National Center for Healthy Housing
<http://www.centerforhealthyhousing.org/>

References:

1. Protect Your Family From Lead in Your Home. U.S. Environmental Protection Agency, U.S. Consumer Protection Agency, U.S. Department of Housing and Urban Development.
2. CDC Content Messaging
3. Childhood Lead Poisoning Surveillance in Wisconsin. Wisconsin Childhood Lead Poisoning Prevention Program. 06/30/08. (Access date: 10/13/08). <http://dhs.wisconsin.gov/lead/Data/lpsurveillance/>
4. General Lead Information: Questions and Answers. U.S. Centers for Disease Control and Prevention. (Access date: 10/13/08) <http://www.cdc.gov/nceh/lead/faq/about.htm>.
5. Lead. Wisconsin Bureau of Environmental and Occupational Health. 12/08/06. (Access date: 10/13/08) <http://dhs.wisconsin.gov/eh/ChemFS/fs/Lead.htm>
6. Wisconsin Department of Health and Family Services, Division of Public Health, Bureau of Environmental and Occupational Health. The Legacy of Lead: The Report on Childhood Lead Poisoning in Wisconsin 2008, PPH 45109 (5/08)