

FactSheet

Para Su Información

Lead Poisoning

What is lead poisoning?

Lead poisoning occurs when too much lead accumulates in the body.

Lead is a metallic element that can be absorbed by the body, primarily through the lungs and stomach. Generally, lead poisoning occurs slowly, resulting from the gradual accumulation of lead in bone and tissue after repeated exposure.

It is important to note that young children absorb lead far more easily and rapidly than adults. The developing nervous systems of young children are more susceptible to the adverse effects of lead. Unborn babies are also susceptible to the adverse effects of lead, as it crosses the placenta during pregnancy.

However, lead poisoning can affect nearly every system in the body. It can cause learning disabilities, behavioral problems and at very high levels, seizures, coma and even death.

Lead is listed as a known carcinogen (a cancer causing substance) in the U.S. Environmental Protection Agency's (EPA) Toxic Release Inventory.

The Centers for Disease Control and Prevention (CDC) has determined that nearly 310,000 children in the U.S. between the ages of 1 and 5 years still have elevated blood lead levels.

Between January 2005 and December 2006, 15 children tested with elevated blood lead levels in Clark County; 13 of the 15 cases occurred in children age 6 or younger.

How can a person get exposed?

Sources of Lead

In the past lead was widely used in such things as household paint, gasoline, pipes and pesticides. The use of lead has been restricted in these and many other products, but a person may still become exposed to lead from a variety of sources. The following is a list of common lead sources:

- Paint chips from interior and exterior paint in homes built before 1978
- Soil, especially in dense urban areas and playgrounds
- Household dust, and debris from older building renovation
- Contaminated drinking water due to leaching in homes with lead pipes, lead solder, brass fixtures, and/or brass valves
- Imported cosmetics
- Imported candy
- Imported toys
- Traditional home remedies, such as Greta and Azarcon, an orange powder used to treat upset stomach (empacho) in the Hispanic culture, Ghasard used as a tonic in Indian folk remedy, and Ba-baw-san, a Chinese herbal remedy used to treat colic pain or to pacify young children
- Pottery and ceramics
- Work and hobby activities, such as construction, remodeling, radiator repair, pottery making, or the use of an indoor firing range

(continuado)

Routes of Entry

Lead is usually introduced into the body through ingestion or inhalation. A person typically eats foods or puts other items contaminated with lead into his mouth or breathes in dust or fumes containing lead.

Who is affected the most?

Children under the age of 6 years are at greater risk of elevated blood lead levels because of normal hand to mouth activity in areas or with items potentially contaminated with lead.

Additionally, because certain parts of their nervous system are in the early stages of development, they are more susceptible to the toxic effects of lead.

What are the symptoms?

Symptoms in children and adults are generally not the same. Table 1 is a comparison of lead poisoning symptoms as seen in children and adults. Many adults and children may not have any noticeable symptoms of lead poisoning.

Table 1. Symptoms of Lead Poisoning

Children	Adults
Anemia	Anemia
Abdominal pain	Abdominal pain
Constipation	Depression
Decreased appetite	Fatigue
Diarrhea	Gout
Learning problems	Heart failure
Lowered IQ	High blood pressure
Sleeplessness	Kidney failure
Tiredness	Reproductive problems
Vomiting	Wrist or foot weakness

Can a person suffering from lead poisoning transmit this ailment to another person?

No. Lead is not passed person-to-person.

What is the treatment?

Some doctors stress the importance of a sensible diet to aid in the reduction of lead in the body.

Most doctors familiar with lead poisoning prescribe chelation therapy if blood lead levels become excessively high, to help extract lead from the soft tissue and flush it from the body.

Chelation therapy uses agents to bind to lead stored in the bones and organs. The agent and bound lead are disposed of through normal elimination. Consult your doctor for further information and methods of treatment.

What health effects are associated with lead poisoning?

Table 2 shows some health effects resulting from lead poisoning.

Table 2. Health Effects of Lead Poisoning

Children	Adults
Behavioral problems	High blood pressure
Damage to kidneys, nervous system and brain	Reproductive complications (infertility in males; miscarriages in females)
Learning disabilities	Cancer
Loss of visual and motor skills	
Slowed or stunted growth	

How can lead poisoning risk be reduced or prevented?

- Do not eat imported goods that are suspected of containing lead.
- If lead paint has been found in your house, eliminate contaminated dust by using a solution of TSP (tri-sodium phosphate) and water.
- Damp mop floors and clean other surfaces with a cloth or sponge that will not be re-used on dishes, eating, drinking or cooking utensils.
- Block painted window sills and moldings with heavy furniture to keep children away.
- Install vinyl siding over exterior lead painted surfaces.
- Plant grass to control dust.

- Reduce children’s contact with soil if your house was built before 1978 or is near a major highway.
- Plant bushes near exterior walls to keep children away.
- Test your water for lead content and assure that it is within recommended limits.
- Run tap water for 60 seconds before using it whenever the water may have been standing awhile.
- Use cold tap water for drinking, cooking and making infant formula because it carries less lead. (Boiling the water concentrates the lead.)
- Check pottery, china and leaded glassware for lead content.

What should I do if I, or someone I know, begin to show symptoms?

Seek the advice of a doctor.

Where should I go for screenings, periodic monitoring and treatment?

Visit your doctor’s office.

Where can I get more information?

Contact your doctor or the Southern Nevada Health District, Childhood Lead Poisoning Prevention Program at (702) 759-1283.

National Resources

- National Lead Information Center
(800) 424-5323
<http://www.epa.gov/lead/>
- U.S. Consumer Product Safety Commission
(800) 638-2772
www.cpsc.gov
- Children’s Environmental Health Network
(202) 543-1147
www.cehn.org



P.O. Box 3902, Las Vegas, NV 89127
(702) 759-1000 | www.SNHD.info