Elevated Blood Lead Levels in Adults

What is an elevated blood lead level?

Lead is a naturally occurring, bluish-grey metal. Exposure to lead can occur through inhalation or ingestion from anything that produces or contains lead dust or fumes. The reportable level in Virginia for elevated blood lead in adults is 25 μg/dL.

Who gets elevated blood lead levels?

About 95% of all reported elevated blood lead levels in adults in the United States are work-related. Occupations with the greatest risk include battery manufacturing, lead smelting, sandblasting, soldering, automobile repair, and construction. Other risk factors for adult lead exposure include auto body repair at home, shooting firearms, use of folk remedies (including Greta and Azarcon), electronics repair, stained glass or jewelry making, painting/paint removal, remodeling, moonshine, or living near landfill and hazardous waste sites.

What are the symptoms?

Individuals with elevated blood lead levels may be asymptomatic, but some symptoms include loss of appetite, constipation, nausea, insomnia, irritability, headache, muscle/joint pain, anxiety, weakness, hyperactivity, tremor, numbness, dizziness, pallor, colic, abdominal pain, metallic taste, encephalopathy, seizure, and infertility/sterility.

How soon do symptoms appear?

This depends on the level of lead in the blood.

How is an elevated level of lead in the blood detected?

The only way to tell if a person has an elevated level of lead in the body is to get a blood-lead laboratory test.

How is an elevated blood lead level in an adult treated?

For adults with very high levels of lead in the blood, lead may be removed by a treatment called chelation. Chelation therapy can have adverse effects, and clinicians should not begin treatment for lead toxicity without consulting a medical toxicologist. The primary “treatment” for elevated blood lead levels is to reduce or prevent further exposure to lead.
What can be done to prevent adult lead exposure?

Exposure to lead in the workplace can be reduced or prevented through the use of engineering controls that reduce air-lead levels. Exposure can also be reduced through the use of protective clothing and respirators. If working in a lead prone occupation, wash hands and face before eating or drinking, eat and drink in areas free of lead dust and fumes, change into different clothes and shoes before working with lead, shower after working with lead before going home, and wash clothes separately from other family members’ clothes.

How can I learn more about elevated blood lead levels?

For additional information, please visit: http://www.atsdr.cdc.gov/ToxProfiles/tp.asp?id=96&tid=22.

You may also call your local health department if you have questions or concerns about elevated blood lead levels. A directory of local health departments is located at http://www.vdh.virginia.gov/LHD/index.htm.