



Iowa Department of Public Health Adult Blood Lead Epidemiology and Surveillance Program

The IDPH Adult Blood Lead Epidemiology and Surveillance (ABLES) program collects results of all blood lead testing done on Iowans. The purpose of the program is to reduce the number of Iowa adults with elevated blood lead levels (EBLs) by working with individual lead-poisoned adults to reduce their blood lead levels, and by providing information on how adults can reduce their exposure to lead in the workplace and home. Lead exposure – even at levels previously considered safe – can cause serious acute and chronic health problems for adults as well as children. Blood lead tests of 10 µg/dL (micrograms per deciliter) or higher are currently defined as an elevated blood lead level (EBL) for adults in Iowa.

When an Iowan 16 years of age or older has a blood lead level of 20 µg/dL or higher, the IDPH ABLES program contacts them to ask them about their exposure. This is usually done by phone or mail. Based on this information, we provide information to them that can help them prevent further exposure. Follow-up contact to medical providers or patients may also be done for blood lead tests with results of 10-19 µg/dL to obtain information such as employer (industry), job duties (occupation), or other missing information required under the Iowa Administrative Code [641] Chapter 1, which covers mandatory reporting of infectious diseases, poisonings, and environmental or occupational exposures, diseases, and conditions. Confidentiality is maintained throughout the case investigation or follow-up process.

Iowa had 3,005 adults tested for lead exposure in 2012, with 818 adults diagnosed with an EBL of 10 µg/dL or higher (27% of those tested). Of those with elevated lead levels, 22 people had blood lead levels of 40 µg/dL or higher, 174 had blood lead levels of 25-39 µg/dL, and 622 had blood lead levels of 10-24 µg/dL. These numbers mean Iowa adults have a higher rate of exposure than the national rates of exposure for adults. Most Iowa adult lead exposures are from work-related exposures in manufacturing, residential and commercial renovation work, radiator repair work, and work with lead solder. Additionally, a number of adults were exposed through hobby activities involving firearms and casting or reloading shot. Other routes of exposure are also identified each year.

In Iowa, 3.2% of the children tested were lead poisoned in 2011 – higher than the national average of about 1.6%. Many Iowa children are lead poisoned by swallowing or breathing dust, chips, or soil contaminated by the lead-based paint used in homes built before 1978. Children and family members of lead-exposed workers may be at risk of lead exposure brought home as dust on a person's work clothing or found in the vehicle driven to and from work. Information is available to help adults decrease this risk of take-home lead. Pregnant women or children less than 6 years of age in the home of an adult with an elevated blood lead level should talk to their medical provider as soon as possible to arrange testing for lead exposure.

The IDPH ABLES program is available to answer general questions or provide information and education regarding adult lead exposure upon request to individuals and employers. The IDPH Lead Program oversees formal training of lead inspectors, lead abatement contractors, and anyone doing renovation or repair work on housing and child-occupied facilities built prior to 1978. Additional information about IDPH lead-related programming is available at www.idph.state.ia.us/LPP/Default.aspx. Specific questions regarding work-place exposure regulation should be directed to Iowa WorkForce Development Occupational Safety and Health Enforcement (I-OSH: 515-242-5870) or their Compliance Assistance Program (515) 281-7629.

Iowa Department of Public Health Occupational Health & Safety Surveillance Program (OHSSP) Adult Blood Lead Epidemiology & Surveillance (ABLES): (800) 972-2026

www.idph.state.ia.us/LPP/ www.idph.state.ia.us/LPP/ABLES.aspx

Kathy Leinenkugel: (515) 281-4930 kathy.leinenkugel@idph.iowa.gov

Rob Walker: (515) 281-0908 robert.walker@idph.iowa.gov

Fax: (515) 281-4529

Resources for Use by You, your Employer, or your Medical Provider:

Iowa Department of Public Health Occupational Health & Safety Surveillance Program (OHSSP)
Adult Blood Lead Epidemiology & Surveillance (ABLES): (800) 972-2026

Website: www.idph.state.ia.us/LPP/ABLES.aspx

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- Rob Walker: (515) 281-0908 robert.walker@idph.iowa.gov
- Fax: (515) 281-4529
- Mandatory reporting: a copy of the regulations that require blood lead test reporting in Iowa: [641] Iowa Administrative Code Chapter 1 www.legis.state.ia.us/asp/ACODocs/DOCS/641.1.pdf
- Annual IDPH Report, including adult lead data – link from www.idph.state.ia.us/Cade/Default.aspx under “Reports” scroll down to find current year (most recent is 2012 Annual Report).

National Institute for Occupational Safety & Health (NIOSH)

- NIOSH Lead page www.cdc.gov/niosh/topics/lead/
- NIOSH data www.cdc.gov/niosh/topics/ABLES/ables.html
- NIOSH indoor firing ranges: www.cdc.gov/niosh/topics/ranges/
- NIOSH Health Hazard Evaluation Program and request information: www.cdc.gov/niosh/hhe/
- Ladder safety app <http://blogs.cdc.gov/niosh-science-blog/2013/08/27/ladder-safety/>

Iowa Workforce Development:

- **OSHA Consultation & Education:** (515) 281-7629
www.iowaworkforce.org/labor/iosh/consultation/index.htm
 - For more information regarding OSHA Consultation's **free and confidential** service, please contact them at the address, phone numbers, or e-mail addresses listed on their website.
- **Iowa Occupational Safety & Health (I-OSH):** (515) 281-5387 or (800) 562-4692
www.iowaworkforce.org/labor/iosh/index.html
 - For answers to questions about workplace safety regulation and enforcement, call (515) 242-5870.
 - For information on how to file a complaint, call 1-800-562-4692 or 515-242-5870 or click on “File an OSHA Complaint” at the I-OSH website.

Federal Occupational Safety & Health (OSHA)

- OSHA Lead in Construction – 2003: www.osha.gov/Publications/osha3142.pdf
- OSHA Lead Quick Card -2005: www.osha.gov/OshDoc/data_Hurricane_Facts/lead_in_construction.pdf
- OSHA Standards for Lead Workers/Employers www.osha.gov/SLTC/lead/standards.html
 - See Medical Surveillance Lead in Construction summary www.dol.gov/elaws/osha/lead/freqH.asp
- OSHA Lead Safety & Health Topics page: www.osha.gov/SLTC/lead/
- OSHA lead smelter tool www.osha.gov/SLTC/etools/leadsmelter/index.html

Medical Guidelines – various

- FDA Ayurvedic Product Alert: www.fda.gov/downloads/ForConsumers/ConsumerUpdates/ucm050819.pdf
- Medical Guidelines for the Lead-Exposed Worker: California Department of Public Health www.cdph.ca.gov//programs/olppp/Documents/medgdln.pdf
- CA Lead Hazard Alert www.cdph.ca.gov/programs/olppp/Documents/LeadHazAlert.pdf
- Medical Management Guidelines for Lead-Exposed Adults, revised 04/24/2007. Association of Occupational and Environmental Health Clinics. www.aoec.org/documents/positions/MMG_FINAL.pdf
- CDC Guidelines for the Identification and Management of Lead Exposure in Pregnant or Lactating Women November 2010. <http://www.cdc.gov/nceh/lead/tips/pregnant.htm>
<http://www.cdc.gov/nceh/lead/publications/LeadandPregnancy2010.pdf>
- Recommendations for Medical Management of Adult Lead Exposure. Kosnett MJ et al. <http://ehp03.niehs.nih.gov/article/fechArticle.action?articleURI=info:doi/10.1289/ehp.9784>
- OSHA Lead in Construction Medical surveillance guidelines [Appendix C](http://www.dol.gov/elaws/osha/lead/freqH.asp) or www.dol.gov/elaws/osha/lead/freqH.asp
- OSHA administers a program for the approval of laboratories submitting data as required by the OSHA Lead Standard for construction, [29 CFR 1926.62](http://www.ecfr.gov/g29/cfr/1926.62). Employers who are required to perform biological monitoring for blood lead must use an OSHA-approved blood lead laboratory for analysis. [Blood Lead Laboratories](http://www.dol.gov/elaws/SLTC/bloodlead/index.html) or www.osha.gov/SLTC/bloodlead/index.html