MANAGEMENT GUIDELINES FOR BLOOD LEAD LEVELS IN ADULTS

The following categories represent general guidelines. Blood lead level (BLL) monitoring should be done on a schedule based on an individual's risk of exposure to lead. **Primary management of lead poisoning is source identification and the elimination or reduction of further exposure.** A single BLL does not reflect cumulative body burden, nor predict long-term effects. Recent evidence suggests that chronic low-level lead exposure has adverse health effects in adults and no blood lead threshold level for these effects has been identified. Treatment decisions, including chelation, should be made in consultation with a physician knowledgeable about lead poisoning medical management. The most recent NHANES data show that 97.5 percentile for BLL in adults for US adults age 16 years and older is 3.46 μg/dL.

Blood Lead Level (μg/dL)	Management Recommendations
<3.5	No action needed Monitor BLL if ongoing exposure
3.5-9	Discuss health risks Minimize exposure Consider removal for pregnancy and certain medical conditions Monitor BLL
10-19	Decrease exposure Remove from exposure for pregnancy Consider removal for certain medical conditions or BLL ≥ 10 for an extended period of time Monitor BLL
20-29	Remove from exposure for pregnancy Remove from exposure if repeat BLL in 4 weeks remains ≥ 20 Annual lead medical exam recommended
30-49	Remove from exposure Prompt medical evaluation
50-79	Remove from exposure Prompt medical evaluation Consider chelation with significant symptoms
≥ 80	Remove from exposure Urgent medical evaluation Chelation may be indicated

Note:The above management guidelines recommend removal from lead exposure at blood lead levels that are lower than those at which Medical Removal Protection is required under the current OSHA lead standards. However, OSHA job protections also apply whenever a licensed health care provider removes an individual from lead exposure, whatever the patient's blood lead level, if the individual has a lead related problem or has a medical condition that places the worker at greater risk from lead exposure. Because of the complexity in recommending medical removal below levels required by OSHA, a physician making such a recommendation may want to review the OSHA regulations, consult with a physician familiar with the regulatory process and discuss with their patient how this may affect their employment. For further information on this topic, please see the medical removal protection provisions of the OSHA lead standards.

Medical Guidelines for the Lead-Exposed Worker

Association of Occupational and Environmental Clinics (AOEC) Medical management guidelines for lead-exposed adults, revised 4/24/2007 Washington, D.C. http://www.aoec.org/documents/positions/MMG_FINAL.pdf

California Department of Public Health. Health-based guidelines for blood lead levels in adults 2019.Richmond, CA. https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/OHB/OLPPP/CDPH%20Document%20Library/AdultMgtGuide.pdf

For Additional Information

See below for additional information on related topics such as OSHA offices, occupational and environmental medicine clinics, childhood lead poisoning, environmental exposure assessments or take-home lead poisoning identification/prevention (Note that lead dust from a job can be taken home and expose other household members to lead when work clothes and shoes are worn home):

- Screening and Case Management Guidelines for Children - http://www.cdc.gov/nceh/lead/publications/#screening

- To Find an OSHA Office in Your State - http://www.osha.gov/html/RAmap.html
- Online directory of member clinics of the Association of Occupational and Environmental Clinics (AOEC) - http://www.aoec.org/directory.htm