### Draft Adult Blood Lead Clinical Treatment Guidelines for Minnesota

<table>
<thead>
<tr>
<th>Occupational Exposure</th>
<th>Ongoing/Hobby or One-Time/Point Exposure</th>
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</table>
| **Venous result 0-9.9 ug/dL**  
Unexposed/normal level. | **Venous result 0-9.9 ug/dL**  
Unexposed/normal level. |
| **Venous result 10.0-39.9 ug/dL**  
Acceptable level for long-term exposure.  
- Above 25 Fg/dL - review work habits, compare with levels of co-workers.  
- OSHA requires a blood lead and zpp.  
- Retest in six months. | **Venous result 10-39.9 ug/dL**  
Acceptable level for long-term exposure.  
- Careful history of exposure to prevent further exposure.  
- Retest in six months. |
| **Venous result 40.0-49.9 ug/dL**  
Close observation and follow-up indicated.  
- Consider plant inspection to clarify and solve problem.  
- Re-evaluate work habits.  
- Check blood pressure.  
- Check BUN, CBC, Creatinine, UA and liver enzymes.  
- Retest in one month. | **Venous result 40.0-49.9 ug/dL**  
Close observation and follow-up indicated.  
- Careful history of exposure to prevent further exposure.  
- Identify and control the lead source.  
- Check blood pressure.  
- Check BUN, CBC, Creatinine, UA and liver enzymes.  
- Retest in one month. |
| **Venous result 50.0-59.9 ug/dL**  
Remove from exposure.  
- Per OSHA standard 1926.62 (Construction Industry) remove from workplace until two consecutive results are 40 > ug/dL.  
- Per OSHA standard 1910.1025 (General Industry), if the average of the last three tests; or the last six months worth of blood lead test results are greater than or equal to 50 ug/dL—remove from workplace until two consecutive results are 40 > ug/dL.  
- Re-evaluate work habits.  
- Check blood pressure.  
- Check renal function.  
- Check BUN, CBC, Creatinine, UA and liver enzymes.  
- Retest ASAP (48 hrs. - 1 week). | **Venous result 50.0-59.9 ug/dL**  
Remove from exposure.  
- Check blood pressure.  
- Check renal function.  
- Check BUN, CBC, Creatinine, UA and liver enzymes.  
- Retest ASAP (48 hrs. - 1 week).  
- Chelate if symptomatic (if venous- confirmed). |
| **Venous result 60 > ug/dL**  
Remove from exposure.  
- Remove from workplace until two consecutive results are 40 > ug/dL (OSHA standards 1926.62 and 1910.1025).  
- Re-evaluate work habits.  
- Check blood pressure.  
- Check renal function.  
- Check BUN, CBC, Creatinine, UA and liver enzymes.  
- Retest ASAP (48 hrs. - 1 week).  
- Chelate if symptomatic (if venous- confirmed). | **Venous result 60 > ug/dL**  
Remove from exposure.  
- Check blood pressure.  
- Check renal function.  
- Check BUN, CBC, Creatinine, UA and liver enzymes.  
- Retest ASAP (48 hrs. - 1 week).  
- Chelate if symptomatic (if venous- confirmed). |

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- Child is defined as <72 months of age. Guidelines for the clinical treatment of children with elevated blood lead levels are available through the Minnesota Department of Health (MDH).
- Guidelines for public health case management of children are also available through the MDH.

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For more information about lead, contact the Minnesota Department of Health at (651) 215-0890.  
If you require this document in another format, call (651) 215-0700; or 1 (800) 657-3908; or TTY (651) 215-0707.
Sources of Lead

The most common sources of lead are paint, dust, soil, and water. There are some lead sources that are traditional remedies and cosmetics. Listed below are other more common sources of lead.

**Occupations/Industries**
- Ammunition/explosives maker
- Auto repair/auto body work
- Battery maker
- Building or repairing ships
- Cable/wire stripping, splicing or production
- Construction
- Ceramics worker (pottery, tiles)
- Firing range worker
- Leaded glass factory worker
- Industrial machinery/equipment
- Jewelry maker or repair
- Junkyard employee
- Lead miner
- Melting metal (smelting)
- Painter
- Paint/pigment manufacturing
- Plumbing
- Pouring molten metal (foundry work)
- Radiator repair
- Remodeling/repainting/renovating houses or buildings
- Removing paint (sandblasting, scraping, sanding, heat gun or torch)
- Salvaging metal or batteries
- Welding, burning, cutting or torching
- Steel metalwork
- Tearing down buildings/metal structures

**Hobbies/Miscellaneous**
*(may include above occupations)*
- Antique/imported Toys
- Chalk (particularly for snooker/billiards)
- Remodeling, repairing, renovating home
- Painting/stripping cars, boats, bicycles
- Soldering
- Melting lead for fishing sinkers or bullets
- Making stained glass
- Firing guns at a shooting range