



LEAD

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Background on Lead

Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. There is no characteristic taste or smell to lead. Metallic lead does not dissolve in water or burn; it combines with other chemicals to form lead compounds or lead salts (some lead salts can dissolve in water). Lead is known to be harmful if inhaled or ingested. It can be found in air, water, and on land. When lead is released to land it binds with the soil and does not contaminate the ground water. In surface water lead binds to sediments and can accumulate in some shellfish such as mussels.

Sources of Lead

- Leaches in from lead pipes, lead solder, brass faucets (usually chrome plated), and some water meter components
- Corrosive water (very high or low pH)
- Soft acidic water (low mineral content)

Health Concerns

People with elevated lead levels do not feel sick. The limit for lead is 15 parts per billion set by the state and federal governments.

- Lead can damage the brain, kidneys, nervous system, and red blood cells
- Symptoms are stomach pains, constipation, diarrhea, hyperactivity, weakness, learning disabilities, anemia, aggressiveness, anxiousness, decreased vitamin D metabolism, muscle pain, weight loss, convulsions, and possible death

Why Test for Lead

- If there is copper plumbing and/or chrome plated fixtures (lead solder was banned in the US in 1985)
- There are signs of corrosion from water
- You have a private well
- You live in a high rise (as lead may not be flushed out)
- If your home has lead pipes (built in early 1900's, 1930's, or WWII)
- If you are pregnant or nursing
- If there is a child less than 6 years old (doctor should screen them at 9 and 24 months for lead)

Remedies

- Flush taps or faucets 30 seconds to one minute (if water has sat over 6 hrs)
 - Use only cold water for cooking and drinking
 - Use bottled or distilled water
 - Treat well water to make it less corrosive
 - When building or remodeling insist on lead free plumbing materials (many newer homes use plastic water lines that are glued instead of soldered)
 - Add reverse osmosis or distillation units
 - Install calcite filters between the faucet and the lead problem
 - Periodically remove and clean aeration devices (screen) on faucets
- ** Do not use carbon, sand, cartridge, or micro filters as they DO NOT reduce lead!

Acknowledgements

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National Safety Council



For more information please contact RMB Environmental Laboratories, Inc.