
House Committee on Agriculture, Land Use, and Water

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PUBLIC HEALTH DIVISION
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Health Effects of Lead

Exposure to lead can seriously harm a child's health.



Damage to the brain and nervous system



Slowed growth and development



Learning and behavior problems



Hearing and speech problems

This can cause:



Lower IQ

Decreased ability to pay attention

Underperformance in school



Sources of lead exposure

1 Homes built before 1978 (when lead-based paints were banned) probably contain lead-based paint.

When the paint peels and cracks, it makes lead dust. Children can be poisoned when they swallow or breathe in lead dust.

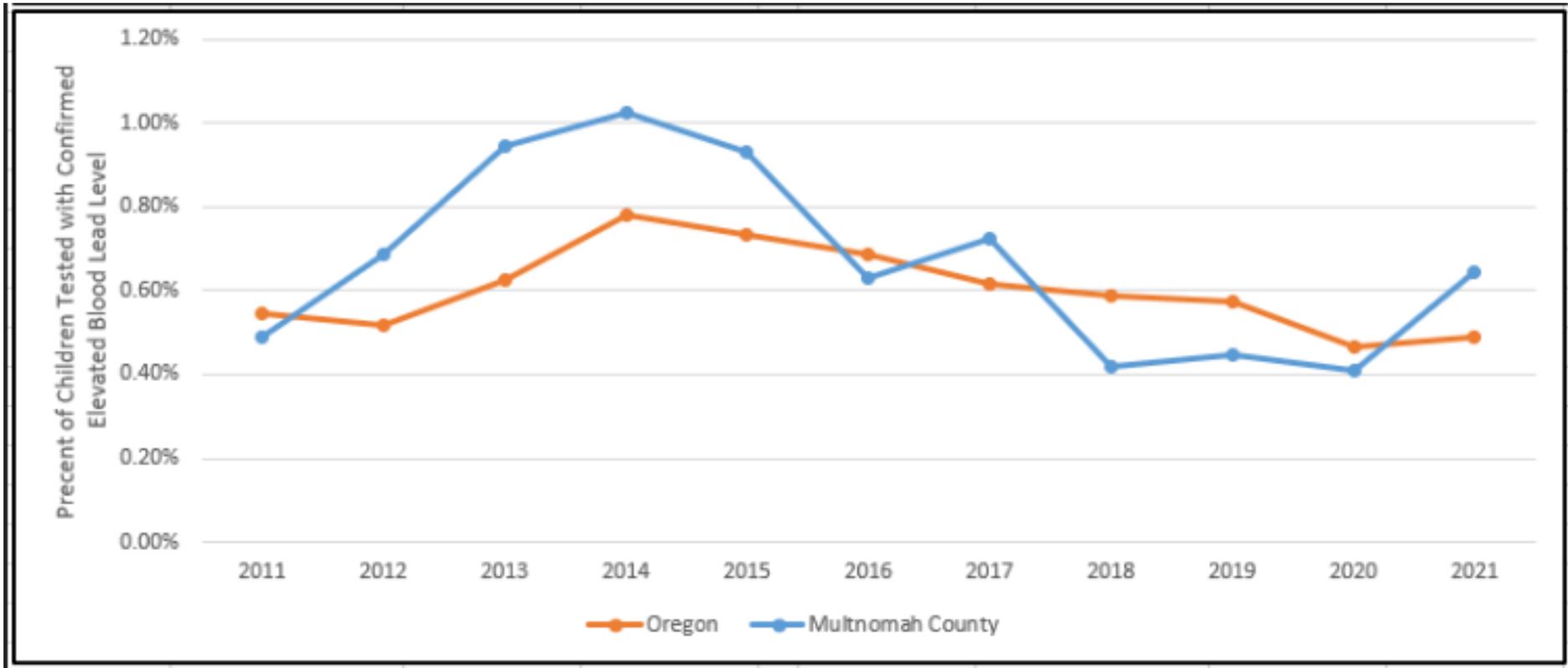
2 Certain water pipes may contain lead.

3 Lead can be found in some products such as toys and toy jewelry.

4 Lead is sometimes in candies imported from other countries or traditional home remedies.

5 Certain jobs and hobbies involve working with lead-based products, like stain glass work, and may cause parents to bring lead into the home.

Oregon Child Blood Lead Data Trends



Regulation of Drinking Water



- OHA Drinking Water Services has primacy to implement federal Safe Drinking Water Act rules in Oregon.
- OHA regulates public water systems, including Portland, to ensure compliance with applicable rules.
- EPA oversees State primacy agencies to ensure they meet federal program guidelines and standards.

Drinking Water rules for Lead



- Oregon has restrictions on the use of lead in distribution and plumbing since 1985.
- No known lead service lines.
- Lead and Copper Rule basics:
 - Rules require monitoring of minimum number of home taps at highest risk for lead in plumbing, e.g. presence of lead solder
 - Intent is as a check on the corrosivity of water and need for corrosion control treatment or “optimization” of existing treatment.
 - 15 ppb Action Level (AL) is based on the 90th percentile level, i.e. 10% of tap sample results >15 ppb. Not a health-based level. Measures lead leaching into water due to corrosivity.
 - Action Level Exceedances are not violations, trigger actions to reduce risk.

Drinking Water rules for Lead



- Portland compliance strategy unique:
 - Lead Hazard Reduction Program approved as equivalent to “optimized” corrosion control in terms of risk reduction since the mid-1990’s. Only minimal treatment to adjust pH, but free lead in water testing and programs to address other sources of lead.
- Lead AL exceedances drive need for treatment:
 - Periodic Lead AL exceedances prompted agreement in 2016-17 for additional treatment.
 - Compliance schedule requires construction of treatment facilities by April 30, 2022.
 - Fall 2021 AL exceedance prompted request for additional short-term risk reduction measures.

Drinking Water rules for Lead



- EPA Lead and Copper Rule Revisions:
 - Revisions adopted by EPA in Dec 2021, most provisions don't apply until Oct 2024. Based on public review, EPA plans to adopt “improvements” to the rule by then.
 - National focus on requirement for water systems to complete lead service line inventories by Oct 2024 and to develop plans to replace all lead service lines.
- Bipartisan Infrastructure Law appropriates \$15 Billion to Lead Service Line Replacement:
 - \$37.2 Million/yr over 5 years allocated to Oregon.
 - No known lead service lines in Oregon. Funds can be used to assist with inventories.