Lead Contamination in Massachusetts Drinking Water Poses Serious Health Risk to Children

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Every year, over 400 thousand people around the world die from lead exposure. This makes lead-related deaths comparable to the number of deaths from cigarettes, and over five times higher than deaths due to accidental opioid overdoses. Adults with elevated lead levels show a 37% increase in all-cause mortality and a 70% in cardiovascular-related deaths.

Yet, despite these staggering numbers, Massachusetts still suffers from dangerously high lead concentrations in its drinking water. Over the past 20 years, more than **120 out of the 351** cities and towns across the state have reported average lead levels exceeding the maximum allowable limit of 15 µg/L. This widespread contamination raises serious public health concerns, particularly for children, who are especially vulnerable to lead’s harmful effects.

“The long-term health consequences of lead poisoning in children are abundantly clear and unfortunately many communities in our region are still seeing high levels of childhood lead poisoning and exposure,” said John Velis, a State Senator of Massachusetts.

In 2022, Massachusetts reported that 449 children between 9 months and less than 4 years of age were identified with lead poisoning, defined as a venous blood lead level (BLL) of more than 10 µg/dL. This represents a prevalence rate of 2.8 per thousand children tested. Drinking water has emerged as a significant contributor to elevated blood lead levels in children. Data indicates that more than 80% of the 62,557 taps tested from 1,738 schools and childcare centers across Massachusetts since 2016 have tested positive for lead.

In Massachusetts, lead can leak into drinking water from aging infrastructure, including lead service lines, solder, and brass fixtures containing lead. The Massachusetts Water Resources Authority (MWRA) conducts regular testing, revealing that while source water is lead-free, contamination often occurs within residential plumbing systems.

While the prevalence of elevated lead levels in Massachusetts’ drinking water is concerning, it’s important to recognize the significant efforts and progress made by state and local agencies to combat this issue. The Massachusetts Department of Public Health’s Childhood Lead Poisoning Prevention Program (CLPPP) has been proactive in implementing measures to reduce lead exposure among children. In the third funding year, the state received $565,000 through cooperative agreement EH21-2102 from the Centers for Disease Control and Prevention (CDC) to support activities such as ensuring blood lead testing and reporting, enhancing surveillance, and improving linkages to recommended services.

Overall, in light of the persistent lead contamination in drinking water affecting over a third of Massachusetts communities and the extensive harm it has on children, it is imperative for both agencies and citizens to intensify efforts toward eliminating lead exposure.