

Lead Concerns

There have been concerns in Washington DC regarding lead in drinking water. Washington, D.C. is experiencing seriously elevated levels of lead in drinking water in many homes served by the District's public water system. An investigation is underway to identify a solution to the problem, which appears to be the result of an increase in the corrosivity of drinking water due to changes in water treatment. Increased corrosion is causing excessive leaching of lead from lead service lines serving homes and from plumbing fixtures into drinking water at the tap.

While this event has placed a national spotlight on the issue of lead in drinking water, we believe the situation in the District is unique. However, some news reports from across the country have focused on concerns related to elevated lead levels in school drinking water.

Children are most at risk from health effects associated with lead exposure. Elevated blood lead levels can delay normal physical and mental development in infants and young children, and cause slight deficits in the attention span hearing, and learning abilities of children. The Centers for Disease Control and Prevention (CDC) has identified a blood lead level of 10 micrograms per deciliter as the level of concern for lead in children.

EPA regulates lead in drinking water through the Lead and Copper Rule, authorized by the 1986 Amendments to the Safe Drinking Water Act. When results from tap sampling indicate that more than 10 percent of homes tested have lead concentrations that exceed a 15 micrograms per liter (Ppb) action level, public water systems must take actions to control corrosion and to inform the public about steps they should take to protect their health.

Drinking water systems in Utah have been testing for lead levels for over 10 years and have generally found no problems. The following is a status report of Lead/Copper sampling done by community and non-transient non-community water systems in Utah that serve populations between 3,300 and 100,000.

Lead 90th Percentile data for systems serving populations between 50,000 – 100,000:

1. There are 6 water systems in this category
2. Five of the six systems sample for lead/copper between 2001 – 2003
3. The one system not sampling is exempt from sampling for lead/copper because its customer base consists entirely of other public water systems subject to the lead/copper rule.

Lead 90th Percentile data for systems serving populations between 3,300 – 50,000:

1. There are 90 water systems in this category
2. Eighty three of the ninety sampled for lead/copper between 2001 – 2003
3. Four of the ninety sampled for lead/copper during 2000
4. The remaining three water systems not sampling are exempt from sampling for lead/copper because their customer base consists entirely of other public water systems subject to the lead/copper rule.

Studies in Utah show that blood lead levels here are significantly lower than the national average.

The Utah Office of Epidemiology report “Prevalence of Elevated Blood Lead Levels in Utah Medicaid Children” states:

“The prevalence of childhood lead poisoning in Utah is slightly lower than the national prevalence (1.2% vs. 4.4%)...

“One preliminary investigation of blood lead levels in 1,262 Medicaid-eligible children in Utah was conducted between November 1, 1993 and October 31, 1994⁹. The statewide prevalence in that study was found to be 2.7% compared to the (1998) statewide prevalence of childhood lead poisoning in Utah of 1.2%. That prevalence rate suggests that the prevalence of elevated blood lead levels in the Utah Medicaid population is the same as the general Utah population (much lower than the national Medicaid population prevalence) and Utah Medicaid children may not be at a higher risk.” (Prevalence of Elevated Blood Lead Levels in Utah Medicaid Children, Final Report, August 30, 2002, p4-5)

The above-cited study also indicates:

“During April 2000 through June 2002, there were 796 children ages 1-3 years, tested for the Medicaid Project... Four of the 796 children screened for the project had a confirmed elevated blood lead level (EBLL). Two additional children were found to have an elevated blood lead level when initially tested, but project staff was unable to obtain confirmatory samples. If these two children were confirmed as having an EBLL, for a total of six children with an EBLL, the prevalence is 0.75%, a range of 10.1 µg/dL to 17.0 µg/dL and a geometric mean of 12.6 µg/dL.” (Prevalence of Elevated Blood Lead Levels in Utah Medicaid Children, Final Report, August 30, 2002, p3)

Another study performed by the Salt Lake County Health Department on children less than 6 years old, enrolled in the WIC program, indicated that of 8277 children, screened between 01/01/1997 and 12/31/2002, 2.1% showed blood lead levels over 10 µg/dL.

These studies show that Utah has historically maintained a lower prevalence of elevated blood lead levels than the national average and that it continues to drop.

Bob Ford of the Department of Environmental Quality, Division of Air Quality investigates the environmental causes of elevated blood levels. In a conversation with Bob, he indicated in all of the studies he has performed to determine environmental causes of elevated blood lead levels in children, lead based paint has been the major environmental contributor. He further states that drinking water has never been found to be a major cause of elevated blood lead levels in children or adults in Utah.

For more information about the Lead and Copper testing performed in your drinking water system or for answers to other questions you can contact Don Lore of the Department of Environmental Quality, Division of Drinking Water at dllore@utah.gov or 801-536-4204.