
From: Sygo, Jim (DEQ)
Sent: Tuesday, October 06, 2015 3:59 PM
To: Krisztian, George (DNRE); Busch, Stephen (DEQ); Cook, Pat (DEQ); Benzie, Richard (DEQ)
Subject: Lead
Attachments: Lead.docx

The attached came off of the Mass. page.

Blood levels in children are not significantly impacted by lead levels in water that are 15 ppb or lower

presented a risk for bottle-fed infants.

The lead studies discussed above exclusively assessed lead in water, and tap water was the only source considered as the cause of the increased BLL. One landmark U.S. observational study conducted during the 1990s studied 183 urban children aged 12–31 months (37%, 12–18 months; 31%, 18–24 months; 33%, 24–31 months) (57). Of these children, 63% had BLLs <10 µg/dL, 20% had BLLs of 10–14 µg/dL, 8% had BLLs of 15–19 µg/dL, and 3% had BLLs ≥20 µg/dL. The study evaluated lead in home foundation perimeter soils, potable water, paint, and house dust. Lead-contaminated house dust was the major contributor to BLLs ≥10 µg/dL. However, the study reported that although lead-contaminated water had a statistically significant effect on children's BLLs after adjusting for other sources of lead exposure, no statistically significant contribution for drinking water could be discerned at levels below the current EPA action level of 15 ppb (57). Lead dust as a primary source of lead for children with increased BLLs was further demonstrated in a subsequent pooled analysis of 12 studies; floor dust lead levels as low as 5 µg/ft² were associated with 5% of enrolled children having a BLL ≥10 µg/dL (58).