

Formula-Fed Infants at Highest Risk for Harmful Effects of Lead in Tap Water



Most parents know the routine of preparing a bottle for a baby – mixing and warming formula and then cradling a little one intent on enjoying a good meal. But in too many homes, this ritual includes an unwanted, extra ingredient – toxic lead that leaches from pipes and fixtures to taint tap water in both old and new homes.

A NEW, NATIONAL STUDY OF LEAD IN TAP WATER

Lead in water has been in the news for many years, but Healthy Babies Bright Futures' newest report is the first study to focus on the highest risk population – bottle-fed infants drinking formula made with tap water. HBBF and Virginia Tech have partnered since 2016 to provide at-cost test kits (available online) to help families test, know if they have a lead problem, and take action. Our new study reveals what these families found.

Nearly 800 families nationwide, from 343 cities in 46 states had their water tested.

79% of homes had detectable levels of lead in tap water.

MANY HOMES HAVE TOO MUCH LEAD FOR CHILDREN:

40% of homes have lead levels above the American Academy of Pediatrics' recommended limit for children (1 ppb).

WHERE DOES ALL THIS LEAD COME FROM?

6-10 million homes in the U.S. get water that flows through old lead pipes. Lead also leaches from old pipe solder and many fixtures. Only a few cities have replaced all of these old pipes.

WHAT DOES IT MEAN FOR FORMULA-FED INFANTS?

10x Infants drink 10x the amount of water, relative to their weight, compared to adults. This means 10 times the lead dose, too. HBBF commissioned a new study of impacts to the developing brain for these vulnerable babies drinking formula made with tap water (see our study).

15% of homes have amounts of lead above the level that causes significant IQ loss with at least 1% loss in lifetime economic productivity for an exposed infant (3.9 ppb). **And many homes have much higher levels than that.**

BLACK BABIES FACE THE HIGHEST RISKS:

26% of black babies are exclusively formula fed, versus 13% of white babies. They are more likely to drink formula at every age, get a higher dose of lead than other babies, and bear the brunt of the risk.

LEGAL ≠ SAFE

15 parts-per-billion, the EPA's action level, is based on cost and feasibility rather than safety. It is 15 times higher than pediatricians' recommended limit for children and only applies to city-wide sampling, not individual homes, where any amount of lead is legal. EPA is rolling back rules to allow cities and water utilities with the highest lead levels 33 years to replace these toxic pipes – and most cities can leave the pipes in place in perpetuity.

WHAT CAN BE DONE?

\$20-\$50 will buy a home water filter certified to remove lead, including a pitcher or faucet-mount filter. Look for NSF/ANSI 53 certification. Elected officials should fund full replacement of lead pipes nationwide, for a net return of \$130-300 in health benefits for every \$100 invested. There's no better investment than our children's health.