

## Op-Ed

### **EPA Should Outlaw Lead Wheel Weights to Reduce Toxic Dust**

by Robert A. Root, Ph.D., and Ellen Barber

Would you be shocked to learn that tons of lead, a toxic metal that can cause irreversible brain damage in young children, are being dumped into our city streets every year? It's true. This long-unrecognized source of lead pollution comes from the weights used to balance every wheel on the cars and trucks we drive.

Deposited mostly at intersections, where pedestrians cross the street, these lead weights are ground into tiny particles by passing traffic and pose a potential health risk to you and your children.

The Ecology Center in Ann Arbor, Mich., has petitioned the Environmental Protection Agency to regulate the use of lead in motor vehicle wheel weights under the Toxic Substances Control Act. The EPA is expected to announce its ruling by August 10, 2005.

Lead is a toxic heavy metal known to affect virtually every system in the body. In fetuses and young children, even tiny amounts of lead impair development of the brain and nervous system. Among other health problems, lead can cause convulsions, brain damage, behavioral disturbances, sterility, and miscarriage.

Despite substantial progress—notably the removal of lead from gasoline and the strict regulation of lead-based house paint—the EPA has failed to meet its goal of eliminating lead poisoning in children by 2000. According to the EPA's website, "Childhood lead poisoning remains a major environmental health problem in the U.S."

In recent years, the Washington Post has covered the problem of unsafe levels of lead in drinking water supplied to customers of the D.C. Water and Sewer Authority and reported in 2004 that 274 utilities, serving 11.5 million people nationwide, registered lead levels in drinking water close to or exceeding legal limits. But other sources of lead in our environment have not received equivalent coverage by the media.

Several years ago, I (Root) became curious about what happens to wheel weights when I began picking up lead at intersections to cast some toy soldiers in an antique mold. To my astonishment, I found more lead wheel weights where I had cleared them out the week before. I began a study to find out how much of this lead is deposited in urban streets. The results of my study appeared in the journal *Environmental Health Perspectives* in October 2000.

For almost a year, I picked up lead wheel weights every two weeks along a major street in Albuquerque, N.M., and found 1.25 pounds per mile, almost all of it in the gutter. That's 32.5 pounds per mile per year. The EPA threshold for allowable lead on the floor of a home is 50 millionths of a gram per square foot. The lead I found in the streets of my city averaged 1,500,000 millionths of a gram per square foot.

I estimate that more than 4 tons of wheel weight lead is deposited in the major streets of Albuquerque every year. Such a large amount represents a potentially significant source of human lead exposure. And the situation is similar in every city in America.

The Ecology Center's petition argues that lead wheel weights represent an unnecessary human health risk. Lead weights could be replaced by nontoxic alternative weights made of steel, tin, zinc, and plastic, which already are available from major suppliers in the United States, Canada, Italy, Japan, and Thailand. The Ecology Center says the cost of the nontoxic weights would be "very similar" to that of lead weights. In fact, U.S. automakers already use alternative weights on vehicles exported to the European Union, which banned lead wheel weights on new vehicles in July 2003 and will ban them on all vehicles in July 2005.

Studies to show the fate of wheel weight lead in the environment have yet to be completed. But even if scientists have not yet documented the pathway from wheel weight lead to children, it would be foolhardy to continue to allow the unregulated depositing of such large quantities of lead in our city streets. Why continue to pollute our streets with ground-up lead wheel weights when readily available and economically feasible alternatives exist?

We believe the EPA should regulate the use of lead in the manufacture of motor vehicle wheel weights. Our children's lives—and our nation's health—depend on it.

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