

SNAPSHOT

Suddenly, many U.S. yards have too much lead

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This year, the Environmental Protection Agency cut its maximum lead level in soil by half. Researchers examined soil samples from citizen scientists and estimated that one in four U.S. households has lead levels above the new standard. Harvard Public Health spoke with the first author of the study, Gabriel Filippelli, chancellor's professor of earth sciences at Indiana University and executive director of the Indiana University Environmental Resilience Institute.

Why study this topic?

We've been exploring variations in lead concentrations in soils because we think that is the key to understanding why kids are still being lead-poisoned, particularly in American cities. All the soils around houses, neighborhoods, parks, and schools have accumulated a lot of lead from the last century. Now, very few people are lead-poisoned, but if you look at city kids, it's close to about 10 percent. That's still an epidemic problem that needs to be confronted.

What did you find?

We found one in four households exceeds the new recommended level. In older cities such as Chicago, New

Orleans, and Indianapolis, we found a huge lead burden. If there are multiple sources of exposure—because the assumption is that kids are getting lead from many sources—the new EPA recommended level is half of that. Close to half of all households exceed that.

What would you like to see happen based on the study's results?

There is a scattershot set of policies and funding sources to address lead. I would like to see a voucher system so that homeowners can have landscaping companies come in and cover over contaminated soil with mulch or geotextile fabrics and a new layer of soil. It dilutes the lead and is not nearly as expensive as removing the contaminated soil.

—*Sarah Muthler*

(Study in *GeoHealth* (<https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2024GH001045>), June 2024)

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