



University Hospitals Rainbow Babies & Children's

Lead Exposure as a Racial Equity and Social Justice Issue

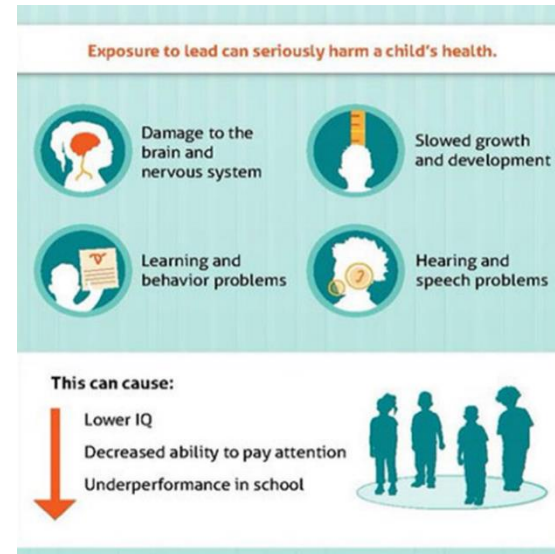
Lead is a brain poison that for decades was used to enhance paint, plumbing, and gasoline, among other things. While policies enacted in the late 1970s requiring removal of lead from paint and gasoline have significantly reduced lead in the environment, millions of young children in the United States continue to be exposed to lead in their homes and communities ([Whitehead et al., 2019](#)). Lead-exposed children more often live in lower-income neighborhoods with older built environments that bear the legacy of systemic and racist divestment practices, such as [redlining](#). Even after adjusting for risk factors, Black children have a [2.8 times](#) higher odds of having elevated blood lead levels compared to White and Hispanic children. Coordinated community action and accountability is necessary to protect the children at greatest risk of lead poisoning and help those already exposed to lead. [Read here](#) to learn more about how public health lead policies can impact health equity.

Lead Exposure in Children

The [CDC defines lead poisoning](#) as “when a person’s health or body functions are negatively affected by lead contamination in what they eat, drink, touch or breathe”. More information on sources of lead exposure can be found [here](#). The CDC acknowledges that [there is no safe blood level in children](#). [Lead exposure](#) is especially harmful to the developing brain, causing problems with cognition, learning, attention, and behavior. Young children are uniquely vulnerable to lead poisoning because of developmentally normal behaviors like crawling and putting things in their mouth, dietary and physiologic factors that result in increased lead absorption, and because they are growing and developing rapidly. [Lead exposure](#) in childhood has lifelong consequences, including increased risk for impaired school performance, decreased productivity, antisocial and criminal behavior, as well as toxicity to other organ systems.

The Cleveland Lead Crisis

In Cleveland, [90%](#) of rental houses were built before 1978 and still have remnants of lead-based paint. Both the age of housing stock, and the extent to which housing and neighborhood infrastructure is maintained has important implications for risk of lead poisoning. The [highest rates of lead poisoning](#) in Cuyahoga County are in neighborhoods with a history of housing law discrimination and racial segregation. Systematic disinvestment in these predominantly African American neighborhoods is related to an increased risk for poorly maintained housing and other neighborhood infrastructure. The [Kirwan Institute’s interactive map of redlining in Cleveland](#) illustrates historical and current concentrations of African Americans in these communities. For comparison, Cleveland lead levels are [2 times higher](#) than in Flint, Michigan, which has drawn national media attention. Local research by the [Center on Urban Poverty and Community Development](#) highlights the impact of lead exposure on kindergarten readiness in Cuyahoga County and disparities in lead exposure by neighborhood and school. Children with elevated blood lead levels were less likely to score on track for language and literacy and over time those exposed to lead in childhood had higher rates of adverse events, such as juvenile delinquency, adult incarceration, and homelessness, than non-exposed peers. These studies can be read [here](#).



While families can take steps to prevent lead exposure in their own homes, fully eliminating the risk for all children, especially those most vulnerable, takes collaborative advocacy and policy efforts that drive action and ensure accountability.

What is currently being done to combat lead exposure?

Locally: The [Lead Safe Cleveland Coalition](#) formed in 2019 as a public-private partnership to prevent lead poisoning in the Cleveland community. It is made up over 400 organizations, state and local governments, and families impacted by lead. Their main focus is [Lead Safe certification](#) for rental homes. The [Lead Safe Resource Center](#) provides Lead Safe Certification navigation, community outreach and organizing, resident and landlord education, and lead safe workforce training. Locally, Better Health Partnership is leading efforts to better understand lead screening and testing efforts in our clinics and opportunities for improvement.

State-wide: Ohio Department of Health and Ohio law calls for all children living in high-risk zip codes and all children insured through Medicaid to complete a lead test at 12 and 24 months. If lead levels are 5ug/dL or greater, additional medical follow-up and [early intervention referrals occur](#). According to a [recent study of children in Cuyahoga County](#), only 50% of those insured by Medicaid were tested by age 1 and only 34% were tested by age 2. The Ohio Chapter of the American Academy of Pediatrics recently completed a [lead prevention quality improvement project](#) to improve testing rates and provides a [resource guide on lead prevention](#). While testing and medical follow up are important, the most important aspect of “treatment” is the prevention of additional exposure. Lead levels of 10ug/dL or higher trigger a home inspection by the local department of health. Ultimately, the effects of lead exposure are not reversible: primary prevention of lead exposure is of paramount importance.

What can you do?

[Read](#) how to prevent lead exposure in your home.

[Find out](#) if you live in a high risk zip code.

[Learn](#) the steps for remediation if you find lead in your home.

[Join](#) the Lead Safe Cleveland Coalition

Contact your health care provider if you have *any concern* that your child may have been exposed to lead.

Learn more:

[Read](#) this Plain Dealer article about the effect of lead and the work still to be done. The article discusses lead screening programs in schools that offer parents the choice to opt out. *Will families at higher risk of lead exposure opt out? If so, how do we address this gap?*

[Watch](#) “Poison in Our Walls,” an investigation into why children are still being poisoned by lead. *How do we prioritize low income and African American families disproportionately affected by lead when resources are scarce or put to other uses?*

[Visit](#) Case Western Reserve’s Center on Urban Poverty and Community Development to learn more about lead safe research. *How can policies and research initiatives address the environmental injustices of lead poisoning?*

LEAD SAFE

CLEVELAND COALITION

Lead Poisoning Prevention Tips
Help Make Your Home Lead Safe* for Children During COVID-19 Outbreak

Walk through your home with these TIPS in hand...

- Remove all shoes at the door.
- Clean out window wells and wipe down windowsills with disposable wipes and place in trash.
- Cover peeling paint with duct tape or contact paper.
- Wet mop or use a Swiffer-like disposable product to clean floors every week.
- Clean items & surfaces that get regular use often with soap and water. Careful with disinfectants - follow the instructions on the label.
- Wash hands regularly with soap and water, especially before eating and after play time.
- Clean toys often with soap and water.
- BE CAREFUL: Opening and closing windows that have lead paint creates lead dust.
- Cover play areas that have peeling paint with materials such as rugs, blankets and plastic sheeting. Keep kids from playing in bare soil.

*Older homes built before 1978 likely to have lead paint.

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For more information, search for Child Lead Poisoning at this link: www.odh.ohio.gov