



Combating Lead Poisoning at a Global Scale to Protect 500 Million Children

About the Project

Pure Earth is helping governments in more than 20 countries reduce childhood lead poisoning at scale and protect 500 million children by 2033. We received support for this major program through The Audacious Project, a collaborative funding initiative housed at TED, dedicated to supporting bold ideas with the potential to change the world.

Working with governments across Africa, Asia, and Latin America, Pure Earth and its partners will generate nationally representative blood lead level data, identify the most harmful and preventable sources of exposure, and implement targeted interventions, from regulatory reforms and safer production practices to environmental remediation. In parallel, Pure Earth is launching the Lead Exposure and Action Data Hub (LEAD Hub), a global platform that links exposure data with evidence-based solutions to sustain and accelerate progress beyond direct country engagement. This effort comes at a critical inflection point, as global commitments to end lead poisoning accelerate, but most countries still lack reliable exposure data, creating a narrow window to translate political momentum into durable, national action.



Solve pollution. Save lives. Protect the planet.

Why Lead?

Lead exposure is a significant public health challenge in low- and middle-income countries (LMICs), where it disproportionately affects vulnerable populations, particularly children. In these regions, lead contamination is often linked to poorly regulated industrial activities, the use of lead-based paints, and the widespread use of lead in consumer goods such as foods, spices, cosmetics, and cookware. Lead exposure is responsible for an estimated 3.5 million deaths each year. More than one billion children are believed to have elevated blood lead levels, damaging brain development, limiting learning, reducing earnings, and increasing the risk of lifelong illness and death. This has broad economic impacts, with an annual economic cost of \$6 trillion annually. Stealing the potential of one child is a tragedy; doing it to a billion children sabotages the trajectory of entire nations and robs a generation of its intellectual capital.

We prioritize lead poisoning not only because its toll is immense, but also because it is solvable today, with the tools we already have. It doesn't require new technologies or the reordering of global economies. It just requires our will to act. And the benefits are enormous. By preventing lead exposure, our work improves health, educational outcomes, and economic development. Children can reach their full cognitive and emotional potential, and societies are better equipped to solve the next set of challenges they face.

Pure Earth's Approach

Pure Earth implements evidence-based solutions in collaboration with governments and trusted public health partners. Our five-phase approach draws on more than 25 years of experience protecting people from lead exposure in low- and middle-income countries, and is tailored to each local context, with phases that can overlap and be adapted to country-specific priorities.

- 1 **Reveal the Crisis:** Working with health agencies, implement nationally representative blood lead level (BLL) surveys to reveal the true prevalence, severity, and distribution of exposure.
- 2 **Pinpoint Exposure Sources:** Conduct in-depth exposure source assessments to understand where lead is lurking. Everyday items including food, spices, paint, cookware, cosmetics, water, and soil are systematically tested in homes, markets, communities and at contaminated sites.

- 3 **Reduce Exposure:** Armed with data, develop and implement national strategies to detect and prevent exposure, remove contaminated items and soil, strengthen product testing and supply chain monitoring, improve regulations, and build enforcement capacity.
- 4 **Mobilize Collective Will:** Educate communities, policymakers, peer organizations, and funders on the health and socio-economic impacts of lead, and transparently share country-specific data, strategies, and results to generate the public and political will needed to reduce exposure.
- 5 **Build Durable Systems:** Build systems for lasting government ownership of lead poisoning prevention.

About Pure Earth

Pure Earth is a global leader in improving public health and development outcomes by reducing exposure to lead and other toxic pollutants. We work closely with governments to embed evidence-based, sustainable solutions into public systems at the national scale. By translating data into action and pairing technical expertise with local partnerships, Pure Earth designs and delivers practical interventions that reduce pollution and poisoning risks, strengthen public response systems, and support long-term health and economic progress.

About The Audacious Project

Launched in 2018, The Audacious Project is a collaborative funding initiative dedicated to supporting bold ideas with the potential to change the world. Housed at TED and powered by the belief that ideas change everything, Audacious leverages a global network of visionary social entrepreneurs and funders to support bold solutions to the world's most urgent challenges. Audacious is issue-agnostic and supports grantees to balance audacity and achievability for lasting, systemic impact. Since 2018, Audacious has catalyzed more than \$7 billion for 70 projects, demonstrating what's possible when we dream bigger and act together. The funding community includes respected donors and philanthropists including ELMA Philanthropies, Emerson Collective, MacKenzie Scott, Pivotal Ventures, Reed Hastings and Patty Quillin, Skoll Foundation, Valhalla Foundation and more.