



USAID
FROM THE AMERICAN PEOPLE

A Lead-Free Future

A multisectoral challenge to protect health and children's development, save lives, and strengthen economies.

Eliminating lead exposure, especially for children, and reducing the negative impacts on development, health, and economic productivity in low and middle income countries (LMICs) is possible. Coordinated actions are required from government, private sector, and civil society actors to identify and mitigate sources of lead exposure and ensure access to early intervention services for exposed children.

What is lead?

Lead is a soft, malleable, heavy metal that is deposited into the body's bones and organs and is most commonly measured in the blood. Lead is a potent neurotoxin, and there is no safe level of exposure to lead. The World Health Organization defines a blood lead level of 5 micrograms per deciliter ($\mu\text{g}/\text{dL}$) or more as the threshold severe enough to trigger public health action. Lead has profound and detrimental impacts on child development and health, leading to poor education outcomes, premature mortality, and reduced economic development. During pregnancy, lifetime cumulative exposures to lead are more readily released from the bones and pass to the fetus contributing to delayed development, as well as increased risks of preterm birth and low birth weight which are leading causes of neonatal mortality.

What are the sources of lead exposures?

The sources of lead exposure vary across and within countries. In most countries, additional data are needed to better understand which sources are dominant. Major potential sources of lead in LMICs are industrial activities, improper recycling of used lead acid batteries and electronic waste, lead-glazed ceramics, cosmetics, traditional medicines, metal cookware, spices, vegetables grown in contaminated soils, lead-based paints, toys, and certain water pipes and fittings. The first "treatment" for lead poisoning is to identify and stop lead exposures.

What can be done?

There are many examples of successful programs to reduce blood lead levels, including requirements for responsible management of used lead acid batteries (Brazil), education and regulation of spice distributors (Bangladesh), and regulating lead in paint (Malawi, Philippines, Kenya). Provision of early childhood educational interventions to improve learning outcomes in lead exposed children has also been demonstrated in the United States.



PHOTO CREDIT: UNICEF Indonesia

KEY FACTS

- Approximately **800 million children** 0 to 18 years of age globally, or 1 in 3 children globally, are estimated to have elevated blood lead levels.
- Lead is estimated to cause at least **1.5 million deaths annually**, primarily due to cardiovascular disease.
- Children in LMICs are losing an average of 6 IQ points** in the first five years of life based on their current estimated blood lead levels.
- Lead exposure during pregnancy is associated with **reduced fetal growth, lower birth weight, preterm births, and stillbirths**.
- The consequences of lead exposure **cost economies at least \$1 trillion annually** in LMICs.
- Lead poisoning is a **complex global challenge that is inextricably linked to social injustices** and significantly undermines health, education, economic growth, and the environment.

USAID Lead Working Group

✉ leadmitigation@usaid.gov

🌐 <https://www.usaid.gov/leadfreefuture>



AREAS OF WORK and **IMPACT**

USAID aims to **increase awareness** at the top levels of government, civil society, and the private sector; increase the number of governments that **enact and enforce legislation**; and **address lead sources and exposures** through **proven interventions**.

What is USAID doing to address toxic lead exposure?

As a starting point, USAID has committed to championing the phase out of lead from consumer goods, by leveraging USAID's global presence to convene around, advocate for, and support lead mitigation efforts by partner governments. Furthermore, USAID prohibits the use of lead paint and lead-containing construction materials in all USAID projects and activities. USAID is also supporting country-level efforts in India, South Africa, and Bangladesh to identify and mitigate sources of lead exposure. This is in addition to USAID's investments in nutrition, education, and early childhood development, which are vital for minimizing the negative impacts of lead exposure.

What is USAID prioritizing looking forward?

USAID is focusing on reduction of lead sources and exposure through:

- Eliminating lead in consumer goods as a first step in addressing widespread exposures to lead in LMICs. This includes working through the Global Alliance to Eliminate Lead Paint to develop and enforce laws to ban lead additives in paint.
- Conducting assessments of local sources of exposure to best inform an appropriate response, including surveys of blood lead levels alongside environmental exposure assessments.
- Elevating the issue of lead exposure in high-level global fora, alongside the U.S. government interagency.
- Mobilizing resources to accelerate implementation.

GLOBAL Call to Action

USAID's Administrator Power advocated a vision for a [lead-free future](#) at the World Economic Forum in January 2024, announcing a global drive to support LMICs to end childhood lead poisoning – starting with raising awareness and phasing out lead domestically in consumer goods such as paint, spices, cosmetics, cookware, and toys.

GLOBAL Alliance to Eliminate Lead Paint

USAID became the first bilateral development agency to join the [Global Alliance to Eliminate Lead Paint](#), a partnership that has catalyzed legally-binding controls on lead paint in almost 40 countries. USAID joins the Environmental Protection Agency and Centers for Disease Control and Prevention within the Alliance. USAID has existing environmental [guidelines](#) that ban lead paint in construction projects and protects workers from encountering lead paint in rehabilitation projects. USAID will prioritize outreach to partner governments to advance similar lead paint regulations and enforcement.

Lead Safe Early Childhood Care and Education SOUTH AFRICA

Building upon current investments in education, USAID is working with relevant stakeholders to conduct assessments of lead exposure tied to early childhood care and education centers, improve awareness of lead poisoning and risk, and identify controls necessary to mitigate and reduce lead exposure.

Partnering Against Industrial Lead and Lead Toxicity INDIA

Building upon USAID investments in maternal and child health, USAID has partnered with the state government of Jharkhand to identify childhood lead poisoning risk factors and sources and to develop mitigation strategies.

Measuring Children's Blood Lead Levels BANGLADESH

USAID is partnering with UNICEF to include measurement of children's blood lead levels in an upcoming Multiple Indicator Cluster Survey. This will be the first nationally representative data on the lead burden in Bangladesh.