

# Appendix I: Grantmaking

Since our March LEAF update, we have approved nine funding opportunities totaling about \$15 million. That includes:

- \$10.4 million to Project Unleaded for source identification and mitigation projects.
- \$2.27 million to UNICEF to increase their capacity to add blood lead level testing into existing child health surveys.
- \$2.17 million to UNICEF to conduct a blood lead level survey and source identification study in Bangladesh.
- \$255,000 to Pahle India Foundation to conduct a comprehensive blood lead level survey and source identification study in Meghalaya, India.
- \$220,000 to Pahle India Foundation to sustain their lead exposure advocacy in India.
- \$189,000 to icddr,b to work on lead contamination in metallic cookware in Bangladesh.
- \$114,000 to the Global Development Incubator (GDI) to conduct due diligence on potential new ventures that could fill gaps in the lead field.
- \$80,000 to Devex to host a panel session on lead exposure at the 2025 UN General Assembly meeting.
- \$49,000 to GDI for research work and to host a workshop on used lead-acid battery recycling.

We have now allocated \$46.2 million of the \$119 million in LEAF. A full list of grantmaking is available [here](#).

## Project Unleaded – source identification and mitigation

\$10.4 million to Stanford University to support Project Unleaded, an initiative building on the past success of Drs. Jenna Forsyth and Steve Luby in identifying spices as a key source of lead exposure in Bangladesh. Their work led to a national ban and reduced blood lead levels by ~30%, showing their ability to translate research into real-world impact.

We're supporting them to scale their work across six workstreams, along with a \$1 million flexible fund:

- Blood lead level surveying and source identification in Pakistan and one additional country
- Using the results of a recent Bangladesh survey to identify sources of lead exposure in Bangladesh
- Assessing spice contamination levels and creating mitigation protocols in 5-6 countries
- Studying the impact of a previously conducted turmeric intervention through blood lead level surveys in Pakistan
- Identifying how big of a problem airborne lead exposure from lead-acid battery recycling sites is and working on interventions to address it
- Continuing to develop portable, low-cost tools for lead testing

We're excited about funding Project Unleaded because of its focus on high-burden countries like Pakistan – which is particularly neglected for its lead burden – as well as Jenna and Steve's strong networks in relevant countries, ability to conduct high-quality research, and track record of mitigation results. Their plan is comprehensive and consists of activities focused on real-world impact. We think that Project Unleaded has the potential to become the field's analytical hub, providing expertise and tools that enable action by other organizations globally.

This grant has some risks associated with it: this would be a significant scale-up for Jenna and Steve, and the case for the grant's impact relies at least in part on other actors responding to Project Unleaded's early-stage research work. However, we're glad that Jenna and Steve are being ambitious. We think that this investment represents our best opportunity to achieve several of our targets while establishing a research platform that will benefit the entire field.

## UNICEF – increasing measurement capacity

\$2.27 million to UNICEF to improve their global lead measurement capacity. These funds would allow them to invest in more tools that would allow them to add blood lead level testing into existing child health surveys. Since the mid-1990s, UNICEF has run Multiple Indicator Cluster Surveys (MICS), focused on children's health in low- and middle-income countries. Because of cost, MICS rarely include blood lead level testing.

Our grant will support UNICEF to:

- Develop and implement blood lead level measurement protocols that can be integrated into their surveys
- Test new, low-cost measurement techniques
- Improve the availability of lead testing equipment through entering into long-term agreements with labs
- Create a guide and provide technical support for measuring blood leads and source testing in various survey contexts

Supporting measurement work is important for reducing blood lead levels, and this grant should increase UNICEF's ability to measure blood lead levels in future surveys. By standardizing measurement approaches, the grant will also help ensure that data collected across countries is reliable and comparable, making it easier to track progress and target interventions effectively.

Our funding is helping to establish UNICEF as a central player in lead measurement, with all the benefits and costs that come with a large UN organization. UNICEF can be slow and bureaucratic, and they can only work in countries that explicitly invite their support. There's also a risk that other organizations doing lead measurement might feel they need UNICEF's approval, potentially creating bottlenecks. However, we think UNICEF is likely the most efficient route to government-endorsed national surveys, and Bloomberg's funding through other organizations has reduced the risk of over-centralizing lead work through UNICEF.

## UNICEF – blood lead level survey in Bangladesh

\$2.17 million to UNICEF to conduct a nationally representative blood lead level survey and source identification study in Bangladesh. USAID had committed to fund UNICEF to integrate blood lead level testing into their Bangladesh MICS child health survey. We're backfilling this work since that funding fell through.

The survey will test blood samples from 9,000 children and 4,000 pregnant women for lead and other heavy metals, along with soil sampling and comprehensive source identification work, like market assessments and home evaluations.

The Bangladeshi government had success mitigating lead in spices after clear evidence that it was a problem, so we hope that this survey and accompanying source identification allow for the government and partners to take action on other specific sources of lead exposure in the country. The integration with MICS provides cost-effectiveness and government legitimacy.

The case against this grant is that the survey is already underway, meaning we're unable to suggest design changes that might make the lead portion more cost-effective. However, we think the benefits of MICS integration outweigh this concern.

## Pahle India – Meghalaya lead measurement

\$255,000 to Pahle India Foundation to conduct a comprehensive blood lead level survey and source identification study in Meghalaya, a relatively small state in northeast India, in partnership with the Meghalaya Health & Family Welfare Department and the Asian Development Bank (ADB). The survey will test 1,274 mother-child pairs and assess lead contamination across key sources including food, soil, water, spices, paint, cookware, and cosmetics. We think ADB will provide an additional \$160,000.

We're supporting this work because it represents an opportunity to support a thorough lead measurement project with government buy-in and support from a co-funder. Though Meghalaya's small size means that the direct impact of this work is more limited than it would be in other states, this also represents an opportunity to test Pahle India's capacity for complex measurement work. We've been impressed with Pahle India's convening and advocacy work, so we're happy to bet on their ability to conduct surveys like this. We're also excited about testing this state-led model; if successful, it could be replicated in larger Indian states with higher lead burden.

## Pahle India – bridge funding

\$220,000 to Pahle India Foundation to sustain their lead exposure advocacy at the national and state levels in India. Our [previous bridge funding grant](#) ended in March 2025, and we were delayed in completing our full renewal investigation. This delay was partly because of competing grantmaker priorities and partly because we wanted to see their progress on measurement work before making our full renewal investigation. This bridge grant will fund them through December 2025, and we hope to complete our full investigation by the end of 2025.

We're excited to continue supporting Pahle India Foundation's work because their team includes influential former government officials, and they have strong relationships with India's ruling political party. Pahle India Foundation has demonstrated value as a convener and advocate, engaging successfully with agencies like the National Centre for Disease Control and generating leads for state-level partnerships in Uttar Pradesh, Rajasthan, and other states. India represents approximately 20% of the global lead exposure burden, making sustained engagement, advocacy, and convening there important.

While Pahle India Foundation's convening and advocacy capacity is clear, we're still evaluating their technical rigor and implementation capabilities. This funding maintains their valuable coordination function while we complete a comprehensive assessment of their capacity and strategic fit.

## icddr,b – research on lead in metallic cookware

\$189,000 to icddr,b to work toward eliminating lead contamination in metallic cookware in Bangladesh. This support will allow icddr,b to map the cookware supply chain, identify sources of contamination during manufacturing, measure lead leaching rates into food, and identify opportunities to address these issues. This is academic research, but icddr,b has a strong track record in translating that into policy relevance – they were very involved in Bangladesh's success reducing lead in turmeric.

In ongoing research icddr,b is doing with Stanford, they find that 90% of the aluminum cookware they investigated in Bangladesh contained lead. They also found very high levels of lead in market samples. However, we're unsure how much contaminated cookware actually impacts blood lead levels; this research will help quantify that relationship and identify intervention opportunities.

Though this could potentially be duplicative with the cookware RCT that Pure Earth is running in Ghana, Bangladesh-specific evidence would be valuable given the evidence we've seen that leaded cookware is a problem in Bangladesh. Additionally, cookware as a lead exposure source remains significantly understudied globally.

This project was originally funded by USAID, and we're partially backfilling this work since that funding fell through.

## Global Development Incubator - discovery efforts for new lead organizations

\$114,000 to the Global Development Incubator (GDI) to conduct due diligence on potential new ventures that could fill gaps in the lead field. GDI has been working with LEAF to identify lead-related efforts that should exist, and they've found opportunities that they want to investigate more deeply to see if these ventures should move toward scale.

- Used lead-acid battery recycling initiative: Despite numerous reports, global progress on unsafe used lead-acid battery recycling remains fragmented. GDI will test whether to launch a global effort to phase out unsafe informal recycling, likely piloting in Nigeria where it dominates exposure profiles.
- Develop Lead Research for Action (LeRA): Current lead measurement efforts aren't as closely linked to policy action as they could be. LeRA is a small, new nonprofit in the lead space aiming to link measurement to action better, but GDI thinks its current scale/pace isn't enough. GDI is considering whether to incubate LeRA; their investigation will tell them whether a revamped LeRA could fill this critical measurement gap to enable effective mitigation more rapidly.

We think GDI is well-positioned to do this discovery work because their organizational focus is on designing high-impact strategies and launching ventures. They've launched 76 ventures over 10 years and have a high bar for launching programs — only 50% of ventures that make it to their discovery phase are launched.

The main risk here is that GDI reaches the wrong conclusion about what to launch or that all efforts result in "no-go" recommendations, but GDI's track record is strong, and even negative results would inform LEAF's broader strategy.

GDI has already done some of the work on these projects, and we're likely to support additional work on the battery recycling initiative. LeRA's likely to be a smaller-scale, design-phase incubation. This grant also supported GDI to do some work on determining whether a new venture should be launched that focuses on lead in spices in India. GDI currently plans not to move forward with the project, since they're not sure they're well-positioned to do this coordination work.

## Devex – lead panel discussion at 2025 UN General Assembly

\$80,000 to Devex to host a panel session on lead exposure at the 2025 UN General Assembly meeting as part of LEAF's mainstreaming strategy.

One year after the launch of LEAF and the Partnership for a Lead-Free Future, this grant enables us to maintain visibility and momentum on lead exposure among key development stakeholders. We'll convene a panel featuring up to three speakers to showcase our grantees' work and highlight the tractability of lead exposure solutions, building on last year's successful UNGA events that helped launch the PLF.

This investment supports our mainstreaming goals by keeping lead exposure visible in development conversations, which is particularly important given USAID's withdrawal from the space. The partnership includes post-event content promotion and aligns with the PLF secretariat's separate roundtable plans at UNGA.

While the direct impact of conference panels can be difficult to measure, this represents a potential path toward reaching many stakeholders in international development at once.

## Global Development Incubator – strategy work and ULAB workshop

\$49,000 to the Global Development Incubator (GDI) to complete some unfinished work from our last engagement with them and to host a workshop on used lead-acid battery recycling. As part of their country prioritization work, they are creating strategy reports for specific countries; they need some top-up funding to complete the reports on Bangladesh and India, which will help inform LEAF's next moves in these high-burden countries.

GDI will also host a full-day workshop in Washington, D.C. to bring together key experts to develop a clear strategy for tackling unsafe used lead-acid battery recycling – a potentially major source of lead exposure that remains understudied. The workshop aims to bring experts together, develop a theory of change and what success would look like, identify what specific work needs to be done, identify priority countries for pilot projects, and explore incubating a dedicated entity to address this issue globally.

With research and convening work like this, there's always a risk that the output isn't as impactful as we hope. However, we've been impressed with GDI's past work, and this is a small grant, so it's relatively low-risk.

# Total funding approved up to August 31, 2025

Grantee	Amount	Award Date	Activity
<u>Pure Earth</u>	\$14,880,500	July 2024	Work on lead advocacy, mitigation (including on spices in India), and research into lead sources and blood lead levels.
<u>Resolve to Save Lives</u>	\$3,040,000	March 2025	Work with the Nigerian government to reduce lead exposure, focusing on lead in consumer products (particularly cosmetics).
<u>Center for Global Development</u>	\$2,700,000	September 2024	Build the evidence base for lead exposure interventions through policy proposals, technical working groups, and subgranting.
<u>UNICEF</u>	\$2,270,000	June 2025	Support UNICEF's global lead measurement capabilities.
<u>UNICEF</u>	\$2,170,000	July 2025	Conduct nationally representative blood lead level surveys and source identification as part of MICS or other surveys.
<u>UNICEF</u>	\$2,000,000	February 2025	Support the establishment of the Partnership for a Lead-Free Future, to assemble actors to accelerate progress on lead exposure.
<u>Pure Earth</u>	\$1,720,000	February 2024	Bridge funding for their work on lead advocacy, mitigation, and research.
<u>Institute for Health Metrics and Evaluation</u>	\$1,519,562	June 2025	Improve modeling of lead exposure health impacts beyond elevated systolic blood pressure pathways, and develop forecasting models to project the effects of different lead exposure policies through 2050.
<u>Pure Earth</u>	\$714,910	May 2024	Bridge funding for their work on lead advocacy, mitigation, and research.
<u>Clinton Health Access Initiative</u>	\$287,500	April 2025	Scope CHAI's ability to address lead exposure in 3-4 high-burden countries, likely including India and Nigeria, assessing potential for their market shaping and policy expertise to be applied to lead remediation.
<u>Pahle India Foundation</u>	\$267,878	January 2025	Bridge funding to continue their work convening the major actors in the lead space in India, as well as advocacy work across a few states.

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Grantee	Amount	Award Date	Activity
<u>Mercer University</u>	\$225,500	February 2024	Research low-cost lead-detection methods and develop a standard operating procedure to reduce the cost of lead paint testing.
<u>Pahle India Foundation</u>	\$187,732	May 2024	Bridge funding to convene the India Lead Working Group and conduct research.
<u>Global Development Incubator</u>	\$113,742	June 2025	Support The Global Development Incubator's due diligence of a used lead-acid battery recycling initiative, LeRA, and a South Asian spice adulteration initiative for potential inclusion in GDI's incubation program.
<u>Stanford University</u>	\$100,796	March 2025	Research low-cost lead-detection methods and develop a standard operating procedure to reduce the cost of lead paint testing.
<u>Devex</u>	\$80,000	July 2025	Host a panel session on lead exposure at Devex at UNGA 80.
<u>Global Development Incubator</u>	\$48,947	June 2025	Host a strategy workshop on used lead-acid battery recycling and continue to research LEAF strategies.
<u>The Lead Exposure Elimination Project</u>	\$19,500	April 2024	Research low-cost lead-detection methods and develop a standard operating procedure to reduce the cost of lead paint testing.
<u>World Health Summit</u>	\$10,000	June 2024	Run a workshop on lead exposure at the World Health Summit.

#### Grants currently in logistics processing

Grantee	Amount	Conditional Approval Date	Activity
<u>Project Unleaded</u>	\$10,444,480	August 2025	Support six workstreams focused on speeding up source-targeted action in two LEAF priority countries (Pakistan and Bangladesh), scaling detection capacity, and building a platform for lead research.
<u>UNICEF</u>	\$2,800,000	March 2025	Support the staffing of the PLF secretariat.
<u>Pahle India Foundation</u>	\$255,000	August 2025	Support a blood lead level survey and source identification study in Meghalaya.
<u>Pahle India Foundation</u>	\$220,000	July 2025	Bridge funding for lead exposure advocacy work.
<u>icddr,b</u>	\$190,000	July 2025	Research lead contamination in metallic cookware in Bangladesh.



## Appendix II: Progress towards targets

Note: When we originally wrote “countries” in goals 1.1-2.2, we intended this to include large states and provinces comparable in size to many countries, such as Indian states, Nigerian states, and Pakistani provinces. We’ve clarified this language to reflect our original intent.

### 1 Measurement

1.1 Blood lead level monitoring	Nationally representative surveys of blood lead levels have been conducted in at least four countries (or large states/provinces) that currently lack that data.	On track
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*Details:* We expect the lead field to achieve this goal. We’ve funded UNICEF to complete a nationally representative study in Bangladesh, and similar studies are ongoing in Colombia, Kyrgyzstan, and Peru. We believe that those four surveys will be complete by 2027, and we also think that surveys in at least a few of Cambodia, Indonesia, Vietnam, Zambia, Kenya, and at least one province in Pakistan will be complete by 2027. If funded, Pure Earth’s Audacious proposal includes a strong measurement arm, including plans for studies in Egypt, Kenya, Nigeria, Uganda, Pakistan, Turkey, Vietnam, and Zimbabwe. However, we think those would conclude after 2027, so they wouldn’t count toward this goal.

1.2 Source identification	Sources comprising the majority of expected lead exposure have been identified in at least five countries (or large states/provinces) where they are not currently known.	On track
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*Details:* At the last update, this goal was not on track. Since then, we’ve funded Stanford’s Project Unleaded, which will conduct comprehensive source identification work in Pakistan and one other country. Additionally, Bloomberg has funded Pure Earth to do comprehensive source identification in its seven priority countries — we think that they will have completed at least three countries by 2027, which will bring us to five or more locations with source identification completed.

1.3 Paint assessment	Marketplace surveys assessing the prevalence of lead in paint have been run in at least 25 countries (or large states/provinces).	On track for 80th percentile
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*Details:* Since the start of LEAF, LEEP has completed 8 paint studies and plans to use Bloomberg funds to scale to a further 38 by 2027. Together, that would bring us to 46 total. This puts us on track to achieve our 80th percentile goal for paint assessment, which is marketplace surveys completed in 45 countries. We think that will bring the global total to ~100 countries with at least one marketplace survey on paint.

1.4 Spices assessment	The prevalence of lead in spices has been assessed in at least 90% of countries (or large states/provinces) in which it is suspected to be a major source of exposure.	Not on track - attention needed
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*Details:* This goal is not on track. We're still learning exactly which locations have spices as a major source of lead exposure, but we suspect that there are around 23. We're also aware of an additional seven countries that may have spices as an exposure source.

Jenna Forsyth's past work in Bangladesh and Pure Earth's LEAF-funded research in Bihar are both completed spice assessments. In addition to that, we're on track for lead prevalence in spices to be assessed in 5-6 countries through Project Unleaded, and we think Pure Earth will use Bloomberg funds to assess spices in three Indian states where we suspect spices are a major source of exposure. That brings us to around 11 currently-funded assessments, which falls short of our 90% target. To address this, we're exploring a proposal with LEEP to add spice testing to their programs. If we make the LEEP grant, they would likely assess around ten countries and large states, which would bring this goal much closer to on track.

## 2 Mitigation

2.1 Paint mitigation	At least 10 countries (or large states/provinces) have largely eliminated lead in paint (i.e. at least 80% of paint by market volume has been confirmed lead-free in a survey).	On track
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*Details:* LEEP's baseline surveys (before intervention) suggest two countries (Mexico and Tanzania) were already at this target, and four others (Kenya, Benin, Burkina Faso, and Peru) were close. LEEP's follow-up surveys (after intervention) suggest Malawi is approaching this target, with 75% of paint lead-free and that Pakistan is making substantial progress; 42% of its paint was lead-free in 2024, compared to 13% in 2021.

Though it's possible survey verification will lag behind some countries' elimination of lead in paint, we think we're on track to achieve this goal, since Bloomberg is focused on lead paint mitigation, and LEEP's mitigation work seems to be going well. Legally binding lead paint controls have been put in place in Sierra Leone, Liberia, Burundi, and Niger. In Ghana, the largest lead paint manufacturer tested lead-free. LEEP also reports that they're working with 17 countries where manufacturers representing over 50% of the lead paint market share are taking steps toward reformulating, and five countries where manufacturers representing over 50% of the lead paint market share have made significant progress toward reformulating.

2.2 Spices mitigation	Lead in spices has been largely eliminated (i.e. at least an 80% reduction in prevalence of contamination) in at least half of the countries (or large states/provinces) in which it has been identified as a major source of exposure. <sup>1</sup>	Not on track - attention needed
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*Details:* This goal is not on track. Since we're not yet sure which locations have spices as a major source of exposure, we're not able to neatly assess how close we are to this goal.

Measurement is a key step toward mitigation. We think our support of Project Unleaded was a significant step toward our mitigation goals, since we hope that their work on spices assessment will identify priority locations and build government awareness needed for effective mitigation. This approach mirrors Jenna Forsyth's strategy in Bangladesh, where assessment work led to successful near-elimination of lead from spices. We're also exploring a grant to LEEP that could support them to do mitigation work in 5 countries/states.

2.3 Other sources	At least three successful mitigation projects have been completed, leading to a measurable reduction in the prevalence of lead by at least 50% in an expected major sources other than spices and paint (e.g. cookware, ceramics, cosmetics). <sup>2</sup>	On track
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*Details:* We have multiple promising pathways to achieve this target, though most projects are still at early stages of implementation.

Pure Earth is advancing work on cookware and cosmetics in Ghana (including an RCT of item replacement), mapping aluminum cookware supply chains in India, and testing ceramics in Mexico, Peru, and Colombia. Resolve to Save Lives is working on cosmetics in Nigeria, and LEEP has proposed expanding its regulatory and market-shaping model beyond paint to cosmetics, cookware, plastics, and water, with new programs expected to launch in Pakistan, India, and other high-burden contexts.

<sup>1</sup> We reworded this target from "The prevalence of lead in spices has been reduced to zero in at least half of the countries in which it has been identified as a major source of exposure" to bring it more in line with the paint mitigation target, acknowledging that reducing contamination to literally zero may be infeasible.

<sup>2</sup> We originally wrote "other than lead and paint" in this target but have corrected this to "other than spices and paint" to accurately reflect our intended scope.

### 3 Mainstreaming

3.1 Funding commitments	Funding commitments (excluding contributors to this fund) have increased from ~\$5M / year to at least \$50M / year by 2027.	Completed
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*Details:* Bloomberg's entry into the space means this target is complete, almost three years ahead of schedule.

3.2 Aid agency attention	At least three bilateral or multilateral aid agencies have dedicated efforts related to lead exposure. <sup>3</sup>	Completed
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*Details:* With the launch of the Partnership for a Lead-Free Future, the World Bank, USAID, UNICEF, and UNEP all had dedicated efforts on lead exposure. WHO will be funded by Bloomberg, and we expect them to launch a major program of work. That makes five institutions with dedicated efforts, though USAID's collapse has reduced that back down to four.

Our 80th percentile outcome for this goal is five bilateral or multilateral aid agencies having dedicated lead exposure efforts. While other aid agencies (Japan, Norway, and Canada) and multilaterals (ADB and UNITAR) have joined the PLF, their financial contributions have been limited to date, so we are not counting them against this goal. We hope to encourage one more bilateral or multilateral to commit to lead exposure through our advocacy work by 2027.

<sup>3</sup> We reworded this target from "At least three bilateral or multilateral aid agencies have dedicated line items related to lead exposure." Line items are specific entries in accounting documents, which are subject to idiosyncrasies in how finances are tracked and don't necessarily reflect the level of activity.