PARTNERSHIP FOR
A LEAD-FREE FUTURE

END CHILDHOOD
LEAD POISONING

Unlocking Blood Lead Level Data:
Technical Webinar to Preview New Blood Lead Level (BLL) Interactive Database for LMICs

Date: Wednesday, 17 June 2026
Time: 09:00 AM EST (60 minutes)

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Technical webinar to Preview New BLL Interactive Database for LMICs

Agenda

- Welcome and Introductions
- Context: Lead Exposure and Data Gaps in LMICs
- Development Overview
- Demonstration: BLL Studies Database
- Interactive Discussion and Feedback Session
- Wrap-up and Next Steps

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Speakers

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Context: The Partnership for a Lead-Free Future (PLF)

- The Partnership for a Lead-Free Future (PLF) was launched in **2024 at the UN General Assembly**. Since then, philanthropic partners have committed about **$500 million** to address childhood lead poisoning.
- The PLF's goal is clear and time-bound: **to help end childhood lead poisoning globally by 2040** by raising visibility, mobilizing resources, and accelerating coordinated action.
- To date, more than **90 members**, including **40 Member States** have joined the Partnership.

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Context: Global Impact of Childhood Lead Poisoning

Health

About **1 in 3** children – more than **1 billion** globally – have blood lead levels at or above 5 µg/dL. In low- and middle-income countries, 2 in 5 children have high blood lead levels.

Lead exposure contribute to **3.5 million premature deaths** globally.

IHME Global Estimates (2019 and 2023)
The Toxic Truth, 2020
WHO, 2022

Education

Lead exposure robs children under five of a total of **765 million points of IQ**.

Children with blood lead levels at 5 µg/dL have been found to score **3-5 or more points** lower on intelligence tests.

20% of the global learning gap can be closed by eliminating lead poisoning.

The World Bank: A World Without Lead: Paving the Path to a Healthy, Productive Future, 2019

UNICEF: Ending Childhood Lead Poisoning by 2040 A strategic investment to unlock the world's hidden human, 2026

Economic

US$6 trillion in annual global economic losses, equivalent to roughly 6.9% of global GDP as of 2019; up to **8.3%** in low-income countries.

Global health burden and cost of lead exposure in children and adults: a health impact and economic modelling analysis; Lancet Planet Health, 2023

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Context: Elevated BLLs

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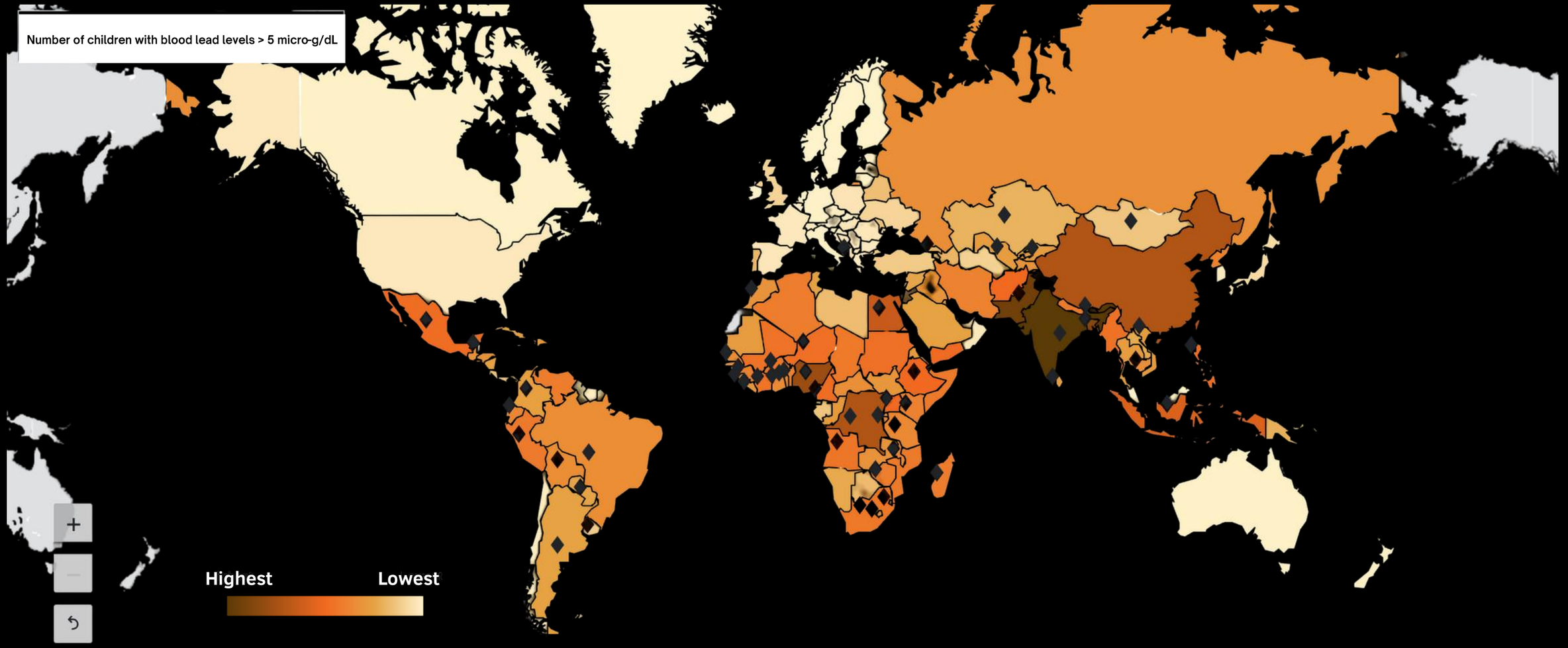

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Background on the Tool

- UNICEF contribution
- PLF transferring to its website
- Will be located on PLF Knowledge Library
  - https://www.leadfreefuture.org/resources/resource-library
- PLF Secretariat to maintain and update

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Context: Data Gaps in LMICs

Indicators*	2027	2030	2035	2040
Country-level indicators				**Outcome goal**
1. Number of countries that have representative childhood blood lead level data	20	60	110	
2. Number of countries that have identified high-priority sources of lead exposure	20	60	110	
3. Number of countries that have an action plan to address priority exposure sources	20	50	100	
4. Number of countries conducting routine surveillance and assessment	10	40	80	
5. Number of countries with new or revised laws to address prioritized sources of lead exposure	5	20	40	
6. Number of countries making progress addressing at least 1 out of the top 3 priority sources of lead exposure	20	60	80	

95%
reduction
in children under 5 (12-59 months) with BLL >5 mg/dL*

Source: Global Framework to End Childhood Lead Poisoning, May 2026, see: https://www.leadfreefuture.org/events-and-resources/knowledge-library/global-framework-end-childhood-lead-poisoning

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Development Overview

- Motivation and objectives

- Original search conducted in Nov 2019 (Ericson et al 2021)
  - Systematic review
  - LMICs
  - Published between Jan 2010 and Oct 2019, containing data after Dec 2004
  - ≥30 subjects
  - Whole blood (venous, capillary, or umbilical)
  - In English
  - Bias assessment

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Development Overview (cont.)

- Additional entries added from search in 2022 (Ericson and Brown 2025)
  - Countries for which no eligible papers were identified in 2021 study
  - Subjects <18 years old only
  - Data collected ≥12 months after leaded petrol phaseout
  - Bias assessment

- Additional entries added in 2025 (UNICEF)
  - From end of 2022 search to Oct 2025
  - Subjects <18 years old only

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Demonstration: BLL Studies Interactive Database Tool

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Interactive Discussion and Feedback Session

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THANK YOU!
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