

TERMS OF REFERENCE

Statistician Consultancy for Private Sector Engagement for Children's Environmental Health

CONTRACT MODALITY Individual Consultancy

DUTY STATION Bangkok, Thailand – Remote / Home-based with some International travel

DURATION OF CONTRACT 31 months

Purpose of Assignment

The purpose of the consultancy is to support country offices and partners to identify and assess relationships between sources of environmental lead exposure and blood lead levels.

Scope of Work

The UNICEF Strategic Plan has elevated action on climate change and environmental degradation as an organizational priority, to be integrated throughout UNICEF programmes. To concretize this, UNICEF HQ is implementing its global [Healthy Environments for Healthy Children \(HEHC\)](#) programme framework in over 20 countries. To mobilize collection action, UNICEF and partners have founded a [Children's Environmental Health Collaborative](#) to protect child health and development from the impact of climate change and environmental degradation.

Lead exposure is a silent but devastating environmental health issue, with far-reaching consequences for children's health and development. An estimated 1 in 3 children globally have blood lead levels that are of significant concern, contributing to an estimated 1.5 million deaths annually. In response to this crisis, the [Partnership for a Lead-Free Future](#) was launched in September 2024 by UNICEF, in collaboration with USAID, UNEP, WHO, the World Bank, Open Philanthropy, and other key stakeholders. The Partnership is the first-ever global, public-private coalition focused on ending childhood lead poisoning in LMICs by 2040. This initiative brings together governments, civil society, and the private sector to champion country-led efforts to eliminate lead from consumer products, improve industrial practices, and enforce lead mitigation standards. The Partnership for a Lead-Free Future is an accelerator partnership of UNICEF's HEHC and is linked to the Children's Environmental Health Collaborative.

UNICEF is currently starting activities in an additional 20 low- and middle-income countries to support the prioritization of the issue in the national agenda. This investment is critical because of the lack of understanding of the issue. The resources will be used for a local children's environmental health assessment (e.g., with an academic institution), building local awareness and institutional leadership on the issue and positioning UNICEF as a credible actor in this new space by rolling out global assets on lead and children's environmental health.

This 30-month consultancy will provide support and technical assistance to low-and-middle income countries on the statistical analysis of lead exposure data within the context of children's environmental health. The consultancy will be managed by the Senior Adviser, Environment. The consultant will work in close collaboration with the HEHC team at HQ, and other offices working on the issue of lead poisoning.

The consultant will:

- Lead the development of training material:** Participate in a series of short format video covering statistical analyses. Develop associated training materials on key topics related to the collection, organization and analysis of statistical data in the context of lead exposure.
- Assist in project design.** Support HQ and country offices to ensure high quality project design, including the calculation of sample sizes.

3. **Conduct statistical analyses:** Review large sets of biological and environmental data to identify and assess relationships between chemical exposure sources and body burden. Identify high-priority sources of lead exposure and characterize their relative contribution to blood lead levels.
4. **Provide technical assistance:** Provide technical support and quality assurance on the design and execution of statistical analyses conducted by national partners. Review reports and provide comments to improve the overall approach.
5. **Develop database:** With guidance from programme team develop a secure internal system to store and access data being collected as part of UNICEF metals surveys. Develop the platform to integrate with existing methods of environmental and biological data collection.

Work Assignments Overview	Deliverables/Outputs	Delivery deadline (in weeks/months) and input days to complete the deliverable
<p>1. Lead the development of training material: Participate in a series of short format video covering statistical analyses. Develop associated training materials on key topics related to the collection, organization and analysis of statistical data in the context of lead exposure.</p>	<p>At least three video tutorials</p> <p>At least 2 slide decks on statistical analysis of Pb data</p> <p>Summary guidance of considerations when conducting statistical analyses of Pb data</p>	<p>31 December 2026 – 30 days</p>
<p>Assist in project design: Support HQ and country offices to ensure high quality project design, including the calculation of sample sizes.</p>	<p>Contribution to at least 20 project designs.</p>	<p>31 December 2028 – 75 days</p>
<p>2. Conduct statistical analyses: Review large sets of biological and environmental data to identify and assess relationships between exposure source and dose. Identify high and low sources of exposure and characterize their relative contribution to blood lead levels.</p>	<p>Analysis of datasets from at least 10 countries</p> <p>Substantively contribute to at least two manuscripts for peer review publication</p>	<p>31 December 2028 – 75 days</p>
<p>3. Provide technical assistance: Provide technical support and quality assurance on the design and execution of statistical analyses conducted by national partners. Review reports and provide comments to improve the overall approach.</p>	<p>Support analysis of datasets from at least 10 countries</p>	<p>31 December 2028 – 75 days</p>

<p>Develop database: With guidance from programme team develop a secure internal system to store and access data being collected as part of UNICEF metals surveys. Develop the platform to integrate with existing methods of environmental and biological data collection.</p>	<p>Develop relational database (MySQL or comparable system)</p>	<p>31 September 2026 –30 days</p>
<p>4. Lead the development of training material: Participate in a series of short format video covering statistical analyses. Develop associated training materials on key topics related to the collection, organization and analysis of statistical data in the context of lead exposure.</p>	<p>At least three video tutorials</p> <p>At least 2 slide decks on statistical analysis of Pb data</p> <p>Summary guidance of considerations when conducting statistical analyses of Pb data</p>	<p>31 December 2026 – 30 days</p>
<p>Assist in project design: Support HQ and country offices to ensure high quality project design, including the calculation of sample sizes.</p>	<p>Contribution to at least 20 project designs.</p>	<p>31 December 2028 – 75 days</p>
<p>5. Conduct statistical analyses: Review large sets of biological and environmental data to identify and assess relationships between exposure source and dose. Identify high and low sources of exposure and characterize their relative contribution to blood lead levels.</p>	<p>Analysis of datasets from at least 10 countries</p> <p>Substantively contribute to at least two manuscripts for peer review publication</p>	<p>31 December 2028 – 75 days</p>

<p>6. Provide technical assistance: Provide technical support and quality assurance on the design and execution of statistical analyses conducted by national partners. Review reports and provide comments to improve the overall approach.</p>	<p>Support analysis of datasets from at least 10 countries</p>	<p>31 December 2028 – 75 days</p>
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Payment Schedule:

Payment will be made on submission and acceptance of deliverables. UNICEF reserves the right to withhold payment in case the deliverables submitted are not up to the required standard or in case of delays in submitting the deliverables on the part of the consultant.

Important Notes

- Individuals engaged under a consultancy or individual contract will not be considered “staff members” under the Staff Regulations and Rules of the United Nations and UNICEF’s policies and procedures and will not be entitled to benefits provided therein (such as leave entitlements and medical insurance coverage). Their conditions of service will be governed by their contract and the General Conditions of Contracts for the Services of Consultants and Individual Contractors. Consultants and individual contractors are responsible for determining their tax liabilities and for the payment of any taxes and/or duties, in accordance with local or other applicable laws.
- The selected candidate is solely responsible for ensuring that the health insurance (and visa if applicable) required to perform the duties of the contract are valid for the entire period of the contract. Selected candidates are subject to confirmation of fully-vaccinated status against SARS-CoV-2 (Covid-19) with a World Health Organization (WHO)-endorsed vaccine, which must be met prior to taking up the assignment. It does not apply to consultants who will work remotely and are not expected to work on or visit UNICEF premises, programme delivery locations or directly interact with communities UNICEF works with, nor to travel to perform functions for UNICEF for the duration of their consultancy contracts.
- UNICEF offers reasonable accommodation for consultants with disabilities. This may include, for example, accessible software, travel assistance for missions or personal attendants. We encourage you to disclose your disability during your application in case you need reasonable accommodation during the selection process and afterwards in your assignment.

QUALIFICATIONS / SPECIALIZED KNOWLEDGE / EXPERIENCE/ COMPETENCIES (CORE/TECHNICAL/FUNCTIONAL) / LANGUAGE SKILLS REQUIRED FOR THE ASSIGNMENT

Minimum requirements:

- **Education:** Master's or Ph.D. in Business Administration with a focus on Corporate Sustainability or a Master’s Degree with significant relevant experience.
- **Work Experience:**
 - Technical expertise in statistical analysis.
 - Demonstrated ability to conduct rigorous research, analyze complex data, and synthesize information into clear, actionable guidance.
 - Excellent ability to produce high-quality technical notes, protocols, reports, and presentations for diverse audiences (technical experts, policymakers, country-level teams).

- Demonstrated past experience in design of studies and assessments, and conducting research related to the environment, environmental health, climate x health, child's health, pollutants and/or toxic metals
 - Minimum 8 years of progressively responsible and relevant work experience in lead programming in low- and middle-income countries.
 - Previous experience of working with UNICEF and the UN is desirable.
 - Previous work on metals exposure is desirable.
 - Experience developing databases is desirable.
 - Knowledge and Skills
 - Knowledge of research, monitoring, and evaluation methods, both quantitative and qualitative, and statistical methods and software
 - Excellent communication and presentation skills
 - Fluency in English (written and verbal) is required; knowledge of another UN language (e.g. Spanish, French, Arabic, Russian) is an asset.
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