

Request for Proposal:
Knowledge, Attitudes and Practices Study on
Lead Poisoning and Pollution in Indonesia

Proposal Due Date:
21 January 2022, 5.00PM WIB

1. Title of Request for Proposal (RFP)

Knowledge, Attitudes and Practices Study on Lead (Pb) Poisoning and Pollution in Indonesia

2. About Vital Strategies

Vital Strategies is a global health organization that believes every person should be protected by a strong public health system. We work with governments and civil society in 73 countries to design and implement evidence-based strategies that tackle their most pressing public health problems. Our goal is to see governments adopt promising interventions at scale as rapidly as possible. Our experts provide technical and professional guidance to partners and government agencies. We speak out, through press releases, publications, social media, and participation in convenings and conferences against the practices of tobacco and the sugary drinks industries. Vital Strategies does not accept gifts or funds from industries related to tobacco, sugary drinks and alcoholic drinks. We actively seek to engage with stakeholders who share our values and seeks to work with partners who endorse and encourage the highest ethical work practices and standards.

3. Purpose and Scope for Proposal

This document serves as the basis for requests for proposals by Vital Strategies to seek a suitable research agency to conduct the Knowledge, Attitudes and Practices (KAP) study in two pilot districts that are exposed to lead poisoning and pollution in Indonesia. Results of the KAP will primarily go toward generating behaviour change communications campaigns that will help to promote risk reduction behaviours within individual families and their communities at large. The results of the KAP will also inform the design of and potential support to community-based action, including by adolescents and young people, to reduce the releases of, and exposures to lead (Pb). This study and the resulting communications campaign is also intended as a resource for other local government and non-governmental stakeholders who are considering planning effective strategies to reduce Pb exposure in their communities.

The study will include quantitative and qualitative research and be conducted using a mixed methods design that includes surveys, in-depth interviews and focus group discussions.

The agency is expected to propose and execute the sampling methodology (including sample size and cut-off age), interview approach, survey refinement (Vital Strategies will provide a draft survey instrument), translation and back translations, human subjects research board review, respondent selection, completion of surveys and focus groups, data management, analysis and reporting.

- Research Objective
The purpose of the study is to determine the knowledge, attitudes, and practices of residents regarding environmental pollution in general and lead pollution issues in two districts in Indonesia.
- Information on selected sites
The survey will be conducted in two areas of Indonesia, still to be determined. The vendor will develop a sampling framework to represent both urban, peri-urban and rural residents of these areas.
- Study subjects
The survey instrument will be conducted with adults (aged 21 – 60) living in the districts, with particular care to ensure that the responses from adults will come from parents and caregivers of children under 19 years of age. Adolescent parents, when identified, will also be surveyed.

In addition to the survey, at least three (3) focus group discussions will be conducted with religious/community leaders, teachers, healthcare workers, and young people aged 20-24 years old to collect qualitative information on KAP and explore possible actions led by community leaders, residents,

and/or local government (healthcare- or school-based) to prevent lead poisoning, particularly around awareness raising and advocacy campaigns.

4. Background and Justification

Environmental pollution is a leading cause of illness and death, particularly in low- and middle-income countries. Globally, it is estimated that one quarter of all deaths are linked to environmental causes. Lead (Pb) is a highly toxic heavy metal that pollutes soil, households, consumer products, water and other media. Sources of lead exposure to children and adults in Indonesia may be common, particularly from pollution from the recycling of used lead-acid batteries (ULAB) and from lead-based paints. Based on a 2021 study, 39% of paint sampled in Indonesia had Pb content greater than 10,000 ppm, which can be considered as extremely hazardous.¹ Other suspected sources of Pb exposure in Indonesia include batik colouring, coal-fired thermal power plants, artisanal and small-scale gold mining (ASGM), and the legacy of lead contaminated soil from the combustion of leaded gasoline.

There is no known safe level of exposure to lead. Chronic exposure is responsible for significant health and behavioural effects, particularly for children. Prevention of exposure through source reduction, emissions control and public awareness are critical for reducing childhood lead exposure. In children, lead affects brain development and may result in reduced intelligence, lower educational attainment and behavioural changes such as reduced attention span and increased antisocial behaviour. Several localized studies conducted in Indonesia have found significant exposure children who spend a lot of time near roads and to children who live in locations close to lead smelting and recycling. Global studies show that children of ULAB recycling workers are often found to have alarmingly high blood lead levels (BLLs). (Supido and Ong, 2000; Roscoe et al., 1999; Daniell et al., 2015). Most exposure to children occurs from exposure to soil and from dust carried home by family or community members working at the ULAB recycling facilities.

The precise number of children in Indonesia exposed to levels of lead that are concerning is uncertain, with estimates ranging from 8 to 37 million with a blood lead level (BLL) of 5 micrograms per decilitre of blood ($\mu\text{g}/\text{dL}$) or greater (Rees and Fuller, 2019; Ericson et al., 2021). Studies in Indonesia have shown that Pb exposure causes clear negative health effects for ULAB recycling workers and their families. One strategy to reduce Pb exposure in this population is through risk communication. For the risk communications plan to be effective, it is necessary to know what communication needs that the population has, how they perceive the risk, how they interpret their situation and opportunity for action, and how best they receive information. It is in this context that we are conducting a knowledge, attitudes, and practices (KAP) survey in two districts that will be selected because they have significant ULAB recycling activity.

Prior to preparing the proposal, we urge applicants to review these studies that provide additional insights on how KAP assessments can inform the development Pb poisoning prevention strategies.

- (1) Adebamowo, E.O., Agbede, O.A., Sridhar, M.K. et al. An examination of knowledge, attitudes and practices related to lead exposure in South Western Nigeria. *BMC Public Health* 6, 82 (2006). <https://doi.org/10.1186/1471-2458-6-82>
- (2) Castro Solórzano, Fiorella; Poma Arroyo, Rosario; Salcedo Santos, Christy; Fernández, María Ángela. Nivel de conocimiento de las madres sobre contaminación de plomo en niños menores de 5 años / Level of knowledge of mothers on lead contamination in children under 5 years. *Rev. enferm. hereditaria* ; 8(2): 104-109, jul.-dic.2015.
- (3) Mahon I. Caregivers' knowledge and perceptions of preventing childhood lead poisoning. *Public Health Nurs.* 1997 Jun;14(3):169-82. doi: 10.1111/j.1525-1446.1997.tb00289.x. PMID: 9203842.
- (4) Greene D, Tehranifar P, DeMartini DP, Faciano A, Nagin D. Peeling lead paint turns into poisonous dust. Guess where it ends up? A media campaign to prevent childhood lead poisoning in New York City.

¹ Based on the study conducted by Balifokus in 2021, 47 samples out of 120 had a lead content greater than 10,000 parts per million lead. Link: <https://www.nexus3foundation.org/single-post/siaran-pers-cat-berbasis-pelarut-dengan-timbal-tinggi-dijual-di-indonesia>

The above studies give some insight on how lead poisoning prevention is conducted in other country locations, and demonstrate that understanding and quantifying the knowledge levels and attitudes on Pb poisoning prevention at the household level is foundational for communications campaigns. Understanding the drivers and bottlenecks will allow messages to go beyond knowledge transfer and provoke action and move people on the behavioural change ladder. This study will also include mapping and analysis of communication channels.

5. Objectives and Scope of Work

Vital Strategies is seeking competitive proposals from qualified vendors to provide the following services:

Survey

- a) To establish baseline data and information for inclusive awareness raising on lead poisoning in two districts.
- b) To develop a sampling strategy to represent the population of parents 60 years of age and younger with children below the age of 19, according to the main sociodemographic variables, such as childhood and parental age, parental educational level, income and occupational sector.
- c) To submit for, and obtain, local human subjects review approval to conduct the study.
- d) To finalize a survey instrument mindful of length, likely completion rates and question priorities, in collaboration with Vital Strategies.
- e) Carry out a survey among the sampled population using offline practices that result in high response and completion rates.
- f) Analyze and report the data, weighted to represent the population, and stratified by key demographic variables to:
 - I. Summarize the responses
 - II. Cross-tabulate responses as appropriate to illuminate relationships among responses
- g) Deliver a cleaned dataset to Vital Strategies (in spreadsheet, database, or statistical software format to be determined)
- h) To interpret findings from the KAP survey for recommendations and implications for risk communication and education strategies

Focus Groups and Interviews

- a) Develop interview instruments and guides to collect qualitative KAP data from religious leaders, teachers, healthcare workers, and young people using offline participatory focus group discussions with interactive activities such as applying 'human-centred design' approaches.
- b) Conduct the discussions, ideally in-person
- c) Code and summarize the findings to:
 - I. Describe the knowledge, attitudes and practices that residents have regarding the actual and potential risk of environmental pollution, especially lead.
 - II. Inform the development of educational outreach, awareness raising, and youth-led campaigns on lead poisoning prevention.
 - III. Identify the most utilized and trusted communication and information channels for residents and in particular parents/caregivers to receive environmental health and other public health information, stratified as above.
- d) To interpret findings from the KAP survey for recommendations and implications for risk communication and education strategies.

6. Ethical Considerations

As part of their research protocol, the successful contractor will identify and outline an approach to addressing potential ethical issues in a study involving human subjects, including adults and children. This includes ensuring that all study participants provide informed consent. Guidance on research ethics can be obtained from the following UN documents:

- UNICEF procedure for ethical standards in research, evaluation, data collection and analysis, April 2015 (http://www.unicef.org/supply/files/ATTACHMENT_IV-UNICEF_Procedure_for_Ethical_Standards.PDF).
- Ethical guidelines for evaluations: <http://www.unevaluation.org/document/download/548>•Evaluators' code of conduct: http://www.unicef.org/evaluation/files/Evaluation_Principles_UNEG_Code_of_Conduct.pdf
- Ethical research involving children: <http://childethics.com/wp-content/uploads/2013/10/ERIC-compendium-approved-digital-web.pdf>

7. Survey and Focus Group Instruments

Scope of Survey Instrument

The survey will be divided into several sections as listed in the table below. The survey instrument will combine questions with specific choices (requiring coding of response) and several questions that are open-ended (requiring transcription). A more detailed draft survey instrument will be supplied to the successful contractor.

Section	Rationale for this Category	Expected Number of Questions
Socio-demographics	Understanding the background of respondents will allow us to better target our messaging. We can potentially also draw some initial assumptions on existing knowledge, attitudes and practices based on socio-demographics.	5-7
Media and Information Consumption Habits	This is very relevant toward understanding which channels would be best used to reach out to the respondents.	7-10
Knowledge of Environmental Pollution	Questions to gauge their understanding of environmental health and pollution.	3-5
Knowledge of Pb Pollution (Health effects, Risk Reduction, Attitudes and Practices)	A guided series of questions to understand respondent's knowledge and attitudes on Pb pollution, risk reduction behaviour, attitudes and practices. This represents the longest set of questions on the survey.	8-10
Health Support	To understand better how the respondents deal with health issues (acute or chronic)	3-5

Focus Group Questions

The focus group discussion with religious leaders, teachers, healthcare workers, and young people will explore answers to the following questions:

1. Are you aware that there are toxic pollutants in the environment?
2. What kind of pollutants are there and what are their effects on health, particularly children's health?
3. Are you aware of lead (Pb) pollution, sources of exposure, and health effects?
4. What needs to be done to prevent lead exposure among children, by whom?
5. What needs to be done for children at risk of lead exposure?
6. What information, tools, and skills do you need to act on the above needs?

8. Key tasks and deliverables and payment milestones for this assignment.

Milestone Deliverables	Payment
1. Submission of the draft inception report including the research protocol and findings from initial desk review.	20%
2. Submission of the draft final report including the results of data collection, a clean dataset, and key findings	50%
3. Submission of the final report and power point presentation of key findings.	30%

9. Proposed timeline (following execution of contract)

Tasks	Deliverables	Anticipated Completion
Desk review of available data and studies in the respective fields.		Week 1
Draft inception and research protocol including methodologies, implementation plan, objectives, detailed sampling frameworks, and data collection instruments (English and Indonesian).	Work plan, including methodology, personnel, time frame, sampling frameworks including target number of respondents, data collection instruments, and plans for data tabulation	Month 1
Submission of research protocol to local Human Subjects Review Board	Research protocol, completed IRB forms and submission	Month 1
Recruit and train enumerators/research assistants. Test survey instruments. Conduct data collection at research sites.	Tabulated data with analysis Data collection report including raw data of household survey, and interview/group discussion transcripts	Months 2-4
Transcribe and analyze finding from the field data collection and prepare draft report highlighting the result of field data collection and desk review	Draft study report, including presentation of preliminary findings	Month 5
Incorporate Vital Strategies comments to the draft report, finalize baseline report and presentation of the key findings	Final study report, professionally proof-read with recommendations for communication channels and messaging.	Month 6

10. Eligibility and Qualifications Required

As a global public health organization, Vital Strategies follows the World Health Organization's (WHO) Framework for Engagement with Non-State Actor (FENSA), notably, to "Exercise particular caution ... when engaging with private sector entities and other non-state actors whose policies or activities are negatively affecting human health ...in particular those related to non-communicable diseases and their determinants." (Paragraph 45 of WHO's FENSA).

Potential applicants must confirm that they have not in the past five (5) years had an affiliation with or received support from the tobacco industry or its agents or associates, including any person, interest group, advocacy organization, law firm, advertising agency, or other business or organization that represents the interests of the tobacco industry, and currently does not accept and shall not accept financial or other support from any tobacco product manufacturer or the parent, subsidiary, or affiliate of a tobacco product manufacturer or any associates, as defined above, until at least one (1) year after the end of the Agreement period."

In addition, Vital Strategies will not contract with vendors that work for, or with, the following industries: sugary drinks, and alcohol, unless there is no equally-qualified alternative. When there is no equally-qualified alternative, Vital Strategies will request a firewall.

Applicants should meet the following requirements:

- Prior experience implementing similar surveys over the last 7 years in Indonesia
- Sound knowledge of research and evaluation design: including designing and planning, research and evaluation approaches and methodologies, including quantitative and qualitative research methods;
- Relevant subject matter knowledge and experience in environmental health, specifically lead poisoning or public health research or demonstrated access to such knowledge;
- Experience of implementing gender responsive, ethical and participatory research studies is highly valued, including use of technologies and participatory methodologies with children and adolescents.
- Evaluation management: the ability to manage an evaluation and research process from end-to-end, including conducting and reporting a baseline study and final project evaluation report;
- Country experience: it is particularly important that the team has the appropriate knowledge /experience, language proficiency and cultural familiarity required to conduct the research in Indonesia;
- Communication skills: high level of Bahasa Indonesia and English, including excellent writing and presentation skills
- Information management: design and manage data and information systems capable of managing survey and qualitative data
- Statistical analysis: a range of statistical modelling and analysis of survey data; highly proficient user of SPSS or STATA (or equivalent); and qualitative data analysis software like ATLAS.ti, NVivo (or equivalent).

11. Application Instructions

The proposal should follow the general outline presented below.

1. Statement of qualification (maximum of 5 pages, 11-point font, single-spaced, excluding appendices) should include:
 - a. General description of organization, including organizational qualifications as relevant, and clear statement of eligibility (see above).
 - b. Description of qualified team members (include detailed bio-sketch/CV of qualified team members as appendices). Note – any subcontracting to partner organizations to conduct survey in one or more surveys must be approved in advanced by Vital Strategies. Qualifications of potential subcontractors should be included here.
 - c. Description of related projects (previous and ongoing)

2. Description of proposed methodology (maximum 10 pages), including:
 - a. Description of proposed sampling approach for survey, including data structure to enable overall and stratified analyses, as well as detailed sample size calculation (expected margin of error +/- 3-6%). Provide detailed information on any anticipated statistical adjustment or weighting needed to ensure representativeness of sample
 - b. Survey refinement and testing (including pilot testing), including translation (and back-translation) plan. Vital Strategies provides a draft survey instrument for adaptation and refinement in Annex A.
 - c. Proposed data management (including QA/QC checks) and analysis plan: Proposed analyses should include standard descriptive statistics (frequencies, means) with significance testing (t-tests, chi-squares etc.) and comparisons of key groups. In addition, advanced analyses – such as segmentation analysis – may be considered to identify the varied profiles of attitudes in the population. Vital Strategies will be actively involved in designing and guiding more advanced analyses as relevant.
 - d. Description of recruitment strategy for focus groups/key interviews, including the number of focus groups in each district, the makeup (unique or mixed) of the focus groups, and the methods associated with their conduct.
 - e. How qualitative data will be recorded coded, summarized and reported on to capture essential findings.
3. Description of expected deliverables, including:
 - a. Data files: final survey instruments, syntax file used for data analysis and data cleaning, data file including all analytical variables and weights, data tabulations/tables, etc.
 - b. Draft and final reports in word format in English, containing summary of methods, results, descriptive data analyses and selected overall analyses
 - c. PowerPoint version of results for use in stakeholder presentations
4. Work plan
 - a. Proposed timeline, with work expected to commence by early February 2022.
 - b. Description and anticipated timing of ethics approval process. Timely documentation of IRB exemption and/or approval is the sole responsibility of the contracted agency and must be demonstrated prior to initiation of work.
5. Budget
 - a. Provide a detailed budget of anticipated costs, and pricing proposal by program deliverable.
 - b. Identify any budget contingencies your organization considers relevant.
 - c. Proposed payment and reimbursement plan.

12. Evaluation Process and Next Steps

The final selection will be made on the basis of:

1. Demonstrated qualifications of the team (30%)
2. Quality and scientific-validity of the proposed approach (40%)
3. Appropriateness of the proposed budget (30%)

Respondents will be notified in writing of Vital Strategies' decision. Short-listed respondents may be invited to participate in a conference call to seek additional clarifications / details and may be asked to re-submit with revisions.

Cover Sheet for Proposals

VITAL STRATEGIES Contact Information	
Company Name	Vital Strategies
Company Address	100 Broadway, 4 th Floor, New York, NY 10005
Company Website	www.vitalstrategies.org
Contract Manager	Gurpreet Kaur Bhatia
Contract Manager Email Address	gbhatia@vitalstrategies.org, and operationsrfp@vitalstrategies.org
RESPONDENT Company Information	
Company Name	
Company Address	
Company Website	
Primary Contact Name and Title	
Primary Contact Email	
Authorized Signatory Name	
Authorized Signatory Title	
Type of work carried out by vendor:	
Offices locations included in this RFP	
Existing Contracts	
1. Current or Prior Contract with Vital Strategies?	Yes/No
If Yes, name and contact information of Vital Strategies contract manager	
If Yes, Implementation timeline of existing or prior contract	
2. Current or prior contract with UNICEF?	Yes/No
If Yes, name and contact information of UNICEF contract manager	
If Yes, Implementation timeline of existing or prior contract	