National Profiles on Children’s Health and the Environment
Assessing readiness for improving environmental health protection systems for children

Prepared by Martha Shimkin and Jenny Pronczuk

World Health Organization
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Acknowledgement

The idea of developing National Profiles of Children's Health and the Environment came about as the Sustainable Development and Environment Area of the Pan American Health Organization (PAHO) prepared for World Health Day 2003. We strove toward lasting impact to improve children's environmental health by offering member countries a tool to assess their readiness to improve systems that supported the health and safety of children in settings where children live, learn, work and play.

I am thankful to all who offered their expertise, time, insight and energy in the development of National Profiles of Children's Health and the Environment: Assessing Readiness for Improving Environmental Health Protection Systems for Children. In particular, Mrs. Martha Shimkin, (MShimkin Consulting), who created the profile format and drafted this document, and Dr. Jenny Pronczuk de Garbino, (International Programme on Chemical Safety, Protection of the Human Environment, WHO) who provided expertise, insight, vision and leadership to making the profiles a global project. Thanks, also, for the support of Dr. Margaret Chan, (Director, Protection of the Human Environment, WHO) and Dr. Carissa F. Etienne, (Assistant Director, PAHO). Dr. Hans Lindblad, Consultant in Pediatrics, Karolinska University Hospital-South, Stockholm, Sweden, served as a consultant to the WHO African Regional Office (AFRO) in developing National Profiles of Children's Health and Environment in AFRO. Dr. Lindblad and Mrs. Hawa Mziray Senkoro, Regional Adviser, Environment and Promotion of Health, AFRO reviewed the profile format and gave valuable contributions to this document. I gratefully acknowledge Mrs. Martha Berger and Ms. Cathy Allen, U.S. Environmental Protection Agency (EPA), who not only offered expertise but also provided funding for much of the global effort on children's environmental health profiles. Finally, I thank Ms. Fiona Gore (WHO) for her comments as a member of the review team and all participants to the Lima, Peru (April 2003) and Capetown, South Africa (February 2003) workshops where profiles were presented. My hope, and the hope of all these contributors, is that this document serves as a useful tool to countries everywhere as they turn to improve the lives and well-being of children locally and throughout the world.

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Foreword

A number of diseases and developmental effects in children and adolescents are linked to environmental threats present in the places where children live, learn, play and work. There is growing concern about these paediatric environmentally-related diseases, such as asthma, acute respiratory infections, diarrhea, perinatal illness, vector-borne diseases, toxic exposures and physical injuries. Emerging issues related to potential developmental effects and endocrine disruption linked to some persistent pollutants and the health impact of global change add complexities to the protection of children from environmental threats, both now and in the future.

Indeed, environmentally related diseases represent an enormous global public health challenge, particularly in developing countries and impoverished communities. Even if a country acknowledges the necessity to address these challenges and take action, direction is needed on when, how and where to start and how to gauge progress. The National Profiles on Children's Health and the Environment is a tool to provide this direction. The profiles are intended to enable countries and communities to identify, characterize and assess environmental influences and effects on children’s health, development and well-being, and to measure results and progress over time. The profiles require a two-to-three month exercise for doing the assessment, using a multi-stakeholder approach led by the national government, potentially in collaboration with the World Health Organization (WHO), and partnering with other international, national and especially local organizations.

National Profiles on Children's Health and the Environment: Assessing Readiness for Improving Environmental Health Protection Systems for Children provides guidance and offers a format for preparing National Profiles on Children’s Health and the Environment. Experience has lent itself to the development of this document. Eighteen countries in the Americas and six countries in the WHO Africa Region have been the pioneers in preparing National Profiles on Children's Health and the Environment. These were developed following a draft format designed to facilitate national assessment teams in describing and analyzing various aspects of environmental threats to children. Key findings were presented in regional workshops in Lima, Peru (2003) and Cape Town, South Africa (2004), gaining valuable inputs for revising the profile format proposed (see Annex A). Regional summaries of the first national profiles were prepared by the respective WHO regional offices and are available at www.who.int/ceh. The regional summaries serve as bases for preparing strategies and action plans. Snapshots of the regional summaries are found in Annexes D and E.

Other important international environmental programs have embraced children's environmental health profile development as a means to assess and direct programmatic goals. The Inter-governmental Forum on Chemical Safety (IFCS) has called on parties to support children's environmental health initial national assessment development with a
special focus on children's chemical safety within the profiles.\footnote{1} The Forum IV Meeting held in Bangkok, Thailand, in November 2003, recommended that:

\begin{quote}
Governments should prepare through multi-stakeholder consultation, initial national assessments of children's environmental health and chemical safety. These assessments should identify the priority concerns and provide a basis for developing action plans to address those concerns. Governments should prepare a progress report to Forum V. WHO is requested to develop, through multi-stakeholder consultation, guidance tools, and to assist at least three countries in different stages of economic development in each region and to prepare the assessment and action plans by 2006.\footnote{2}
\end{quote}

The Global Initiative on Children's Environmental Health Indicators, led by several international organizations, including WHO, also supports the profiles as a step that may help to establish a baseline status of children's environmental health, monitor progress and success of interventions, and facilitate the initiation of the indicators work.\footnote{3} The profiles will also contribute to the Health and Environments Initiative (HELI), launched at WSSD, as they will provide baseline information for policy development and implementation.

As children's environmental health grows in the mainstream international environmental arena, countries around the world are interested in developing a baseline profile that states the national readiness to strengthen environmental health protection systems to benefit children's health and well-being. These national profiles also help governments assess whether targets set forward by the Millennium Development Goals are achieved, such as goal number four (MDG 4), to "reduce child mortality" and goal number seven (MDG 7), to "ensure environmental sustainability."

As Secretary General Kofi Annan stated at the 2002 United Nations General Assembly Special Session on Children: "\textit{There is no task more important than building a world in which all of our children can grow up to realize their full potential in health, peace, and dignity.}" National Profiles on Children's Health and the Environment offer countries around the world a tool to assess, change and track progress toward this important task.

\section*{Justification}

The \textit{National Profiles on Children's Health and Environment} are intended to be used as the basis for identifying country priorities, assessing needs, developing strategies, planning actions and securing resources to improve the protection of children from environmental hazards in countries around the world. The methodology proposed is suited for obtaining knowledge on key environmental threats present in the settings where

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\begin{footnotesize}
\footnote{1} Additional information on IFCS is available at http://www.ifcs.ch
\footnote{3} Additional information on the CEH initiative (CEHi) is available at www.who.int/ceh/indicators.
\end{footnotesize}
children live, learn, play and work. It also enables countries to identify existing resources and potential partners to promote children’s environmental health.

The preparation of an initial baseline profile offers a first step for setting priorities for action and planning interventions. This assessment methodology enables countries to collect and provide pertinent information in a relatively fast and cost-efficient manner, and also to measure progress made through the elaboration of annual or bi-annual profiles. The exercise is expected to take up to three months and requires funds necessary to ensure the consistent work of one or more dedicated professionals and convening regular multi-stakeholder meetings. In practice it will also serve as a tool for awareness-raising and programme planning.

Description
The children's environmental health and chemical safety profiles are narrative assessments of the situation of children's environments and their health and development in a given country. They are primarily based upon input from governmental, international, and non-governmental organizations, including professional organizations, academia and the private sector. These groups are convened through a series of multi-stakeholder meetings to discuss responses to a set of questions on a variety of topics related to children's health and the environment. Important input may also come from the review of publications and reports, input from experts in areas related to children’s health, and observation of the settings where children spend most of their time.

The National Profiles on Children's Health and the Environment are qualitative and descriptive. They complement quantitative efforts to assess children’s environmental health through the use of information collection and indicators reporting. A profile is owned by the country that develops it and is often a country's first written document on the status of children's environmental health. It assesses government and national capabilities and interest to explicitly target improved policies and protection of children from environmental hazards.

An initial national profile is intended to be the first of a series of periodic assessments that will allow a country to evaluate progress made and lessons learned, successes and challenges, and overall, to identify key concerns and design actions and interventions so that children are protected and supported as they strive to reach their full potential.
Coordination, collaboration and balance are the crucial elements of a National Profile on Children's Health and the Environment. Representatives of an array of sectors, from all levels of government to a variety of organizations must contribute to the profile development so that it reflects all parts of society. Primary sectors to include are listed below. Countries may need to modify this list, depending on specific situations.

**Governmental organizations**: Governmental ministries and agencies are in a privileged position to initiate the process of developing the profiles. Usually they are in a position to compile responses to the set of questions on a variety of topics found in the children's environmental health profiles format and they are able to involve other potential contributors. Governments organize the effort, seek contributors and convene the key players. The primary ministries or agencies involved in developing the profiles are those dealing with health, environment and education. Others involved are ministries or government entities that address women's health and children/youth welfare. Many other governmental sectors may also participate in preparation of the profiles, such as Ministries of Labor (child labor concerns) and Agriculture (exposure to agro-chemicals).

**Community Groups**: Local governments tend to be tasked with implementation and enforcement of laws and, thus, are key players in the development of national profiles, action planning and project design and implementation. Communities often know about communications successes and ways to reach the general population. They oversee school boards and have direct communications with local schools and community members. They can both provide information from the local level and launch information campaigns to target the local areas. Religious and cultural institutions are often anchors of communities and may play important roles in this effort.

**Non-governmental organizations (NGOs)**: Organizations that promote health, environment and children's issues are welcome partners in the preparation and tracking of national profiles. In some countries, the roles of NGOs are extensive and include participation in the development of regulations and policies, as well as implementation of programs. The professional associations, such as pediatric or medical groups, scientists or doctors for the environment, toxicology societies, and other groups that advocate for health, environment and children are essential partners in the profiles preparation. NGOs serve the public by spreading information and building awareness. They highlight sources of exposure, inform and educate the general population, balance against the interests of industry and academia, and advocate on behalf of children and the environment.

**International organizations**: International organizations provide technical assistance and other resources beneficial to the development of profiles. WHO, specifically, has led the creation of the National Profiles on Children's Health and the Environment. UNICEF, UNEP, and UN Habitat are called to be helpful sources of information, technical expertise and other resources. The IFCS (especially the national focal points) may contribute to the process providing input, advice and guidance on specific chemical safety matters.

**Academia**: Universities and institutions of higher learning are centers for research and education, often the most up-to-date on national and international studies. They provide pools of expertise that can expand and deepen the field of children's environmental health. They are also responsible for teaching future professionals and incorporating new knowledge and findings into their curricula. Academia offers important inputs such as promoting research, assessing risks, convening expert conferences and publishing findings.

**Private Sector**: Domestic, small scale, large scale and international businesses can assist with development of the national profiles. Private industry can provide data, contribute to environmental health awareness campaigns, and offer technical, management and financial resources.
Methodology
The methodology proposed is based upon the use of the format for National Profiles on Children's Health and the Environment (see Annex A). This section recommends steps that may be taken to develop a national profile.

1. **Who initiates and organizes the profile?** To initiate the development of a National Profile on Children's Health and the Environment, good organization will ease the process. The development of a profile should take two to three months and is considered a rapid assessment rather than a long-term study. The following are key steps in organizing such an effort:

   a. **Organizational leads** -- Determine what ministry or agency will lead this effort and identify the leader for this initiative. Give authority to this leader so that he/she is successful in gaining the input and participation needed. Consider hiring a consultant to compile information, draft, and finalize the document. Consultant tasks that may be included in Terms of Reference are provided in Annex B.

   b. **Participating organizations** -- Ensure that all relevant ministries and agencies, offices, and staff are informed about the initiative and understand their roles. Consider the various ministries and agencies, local governments, non-governmental organizations, universities, professional organizations, private entities and others (see Box 1) to determine potential partners in this process. Inform them of the effort, preferably by letter or memorandum, duly signed by a senior level government official.

   c. **Technical assistance and advice** -- WHO and its regional and country offices may help countries develop National Profiles on Children's Health and Environment. Contact the local office to request assistance. Also helpful may be local United Nations Children's Fund (UNICEF) and United Nations Environment Program (UNEP) offices. These and other groups can provide assistance in identifying stakeholders, offering examples of country profiles from other nations, and giving advice based on experience of other countries.

   d. **Financing** -- While conducting a national profile is not expensive, it is resource and time-consuming, requiring some funding, for example to secure the stakeholders meeting or a working retreat and to pay for consultants and other support. It is estimated that $3 to $5 thousand US dollars would cover needs to complete this initiative in most countries.

2. **How is the information selected?** The primary activity of conducting a National Profile on Children's Health and Environment is gathering input, insight and information from the array of ministries and non-governmental sources in the country. It is important to be open to all perspectives of the various sectors and
even to state controversial or doubtful positions so that they may be addressed. Hiring a consultant for this purpose can help to gain objectivity.

a. **Meeting of stakeholders** -- Convene meetings of these stakeholders to discuss and compile responses to the questions provided in the format. Send a copy of the profile format to all potential partners in advance of the meeting. Keep a list of participants, their organizations and contact information for use in obtaining comments on the document. Please refer to a suggested agenda for this meeting in Annex C.

b. **Investigation** -- Using the information obtained in the stakeholders meeting, investigate other sources of information, as well, to find answers to all of the questions posed in the format. Ascertain accuracy of the answers provided in the meeting.

c. **Other sources** -- Consult other potential sources of information, such as the World Health Reports, State of the World's Children and other publications that can verify or augment the information collected.

3. **How is the report prepared?** Using the information collected, draft the National Profile on Children's Health and the Environment. Follow the format order (Annex A), using the boxed headings in the format as sub-titles in the report. Attempt to answer all questions posed in the format, even if some responses are "no information available," and add any other questions that are pertinent to your country.

a. **Drafts and comments** -- Develop a first draft of the National Profile on Children's Health and the Environment. Input all information gathered and carefully note sources, references and the preparation date. Send a copy of the draft profile to all participants of the stakeholders meetings. Provide clear instructions on how to comment (electronically, hand-written mark-ins, other) and give a clear deadline, offering sufficient time to ensure quality comments but keeping in mind the nature of this "rapid" assessment. Incorporate comments, accommodating the various perspectives as much as possible.

b. **Country and stakeholders approval** -- Incorporate comments into the draft and resubmit to all contributors for final review. Prepare final draft and obtain country clearance of the National Profile on Children's Health and the Environment. This stage ensures the ownership by the country of the tool to assess the existent successes and challenges regarding children's environmental health. It also serves as a basis for creating a national action plan to improve the situation.

c. **Presentation** -- Develop a presentation that summarizes the findings of the National Profile on Children's Health and Environment. This can be
used at local, national and international meetings. Be certain to cite the collective and cooperative approach taken and acknowledge the valuable contributions of the various sectors.

4. **Using the Report:** The National Profile on Children's Health and the Environment is intended for use by a country, by its ministries and by all other stakeholders as a basis for identifying priorities and planning/coordinating interventions. Once strengths and weaknesses are identified, the profile serves as a basis for action and evaluation of progress made or lessons learned. It is not a tool to compare the status of children's environmental health across countries but rather as a "self-assessment" tool that will enable evaluation through the years.

   a. **National Action Planning** -- Consider developing a national action plan on children's environmental health, identifying priority areas for improvement. Involve stakeholders from the profile development process to develop a national action plan. Include goals, strategies and timeframes for action.

   b. **Tracking progress** -- Identify key objectives and ways to measure progress toward attaining them. Contact the Global Initiative on Children's Environmental Health Indicators (www.who.int/ceh/indicators or email cehindicators@who.int) to learn about developing children's environmental health indicators that will assist in tracking progress and measuring results. The national profiles will represent a contribution to this Global Initiative.

   c. **Periodic evaluations, modifications** -- Set in motion a plan for evaluating the National Profile on Children's Health and the Environment, determining the frequency (e.g., annual, bi-annual) with which to obtain progress reports and how often to conduct follow-up profiles to modify and update the initial one and identify new successes and challenges.
Annex A:

Outline for Preparing National Profiles on the Status of Children’s Health and the Environment

NOTE: please use the boxed headings as sub-headings in the country/local profile you develop. Use the questions proposed as a guide for obtaining and compiling information and developing an overall assessment of each area. These questions are intended to provide some orientation on the type of information that is relevant for assessing the status of children’s health and the environment. Develop up to three paragraphs for each of the underlined headings, expanding even beyond the questions provided, as deemed necessary. Please take into account for each question the potential gender, rural/urban, cultural and ethnicity issues. Tables necessary to make a point can be annexed. The profiles should cover existing situations, observations and ongoing activities as well as potential opportunities for actions that could be implemented at the country level. Profiles should be dated: once the initial profile is complete, successive national profiles may be prepared periodically to assess progress made and/or changes observed concerning the status of children’s health and the environment in the country.

INTRODUCTION

Overview of children’s environmental health in the country

Provide a general synopsis of the country’s views and position on children’s environmental health, for example, the awareness level of government officials (especially in the health and environment sectors) and the recognition and acceptance of this as a distinct issue.

Key environmental issues

WHO lists the following key environmental risks for children: unsafe water, air pollution (indoor and outdoor), poor food hygiene, poor sanitation and inadequate waste disposal, vector-borne diseases, exposure to chemicals (agricultural chemicals, pesticides used for public health, industrial and consumer uses, industrial chemicals, petrochemicals, chemicals in consumer products, persistent toxic substances, natural toxins and others), and injuries. In addition, children’s health is endangered by other environmental risk factors, such as: poor housing, environmental degradation, UV radiation, heavy traffic and the so-called “emerging” threats (e.g. global climate change, ozone depletion, exposure to endocrine disrupting compounds, and others), and in various settings, such as home, schools, playground, streets, fields and workplaces. Prioritize these for your country according to the impact they have on children’s health, development and well-being. Add areas of focus if necessary. Propose a prioritized list of environmental concerns for children’s health in your country.

Main causes of infant and under-five morbidity/mortality

This information is normally readily available from WHO websites or in the WHO representations in the country. List the top five causes of illness and death for children under one, for children five and under, for children up to 14 and for children as a whole. As the information on chemicals may be somehow limited, make sure you consult other sources of information: poison centres, lead or pesticide poisoning registries, and others. As the age groups of children vary somewhat from country to country, please define the age group that you are reporting (e.g., some define children as 18 years and under, some 20 years and under).
Burden of disease related to environment in children

WHO has information available on its website (www.who.int/phe/health-topics, search for “environmental burden of disease”) and at the WHO representation. WHO reports that environmental threats may cause up to one-third of the global burden of disease. What does the country report? Are there any significant differences between boys and girls or between rural and urban children? Has environmental burden of disease been examined at the country level or does it remain to be done?

ECONOMIC STATUS AND ETHNIC GROUPS

Economic spread between poorest and wealthiest populations

What is the percentage share of income or consumption for the wealthiest 10% of the population? What is the percentage share of income or consumption for the poorest 10% of the population?

Information on high risks/vulnerable groups and demographics

Provide the approximate numbers or percentages of each ethnic population group in your country and the geographic areas they occupy. To what extent are environmental and health statistics routinely desegregated by socio-economic status or ethnicity? Do national environmental or other sectoral policies make specific reference to ethnic groups, particular settings, or to groups that are geographically isolated? Is there any evidence of the impact of ethnicity or socio-economic status on the burden of disease related to environmental threats? Are there any activities on ethnic minorities or disadvantaged groups undertaken by international institutions or non-governmental organizations to which an environmental health and chemical safety component might be added?

NATIONAL GOVERNMENT ROLE

National Policies

Are there specific national policies or stated priorities that support the protection of children’s environmental health? Has the national government development a national profile to assess the national infrastructure for management of chemicals, national priorities or action plans? Are there specific national policies or stated priorities that seem to run counter to the objectives of increasing protection of children from environmental threats (e.g. lax pesticide or toxic chemical regulations, persistence of lead in gasoline despite the proven health benefits of removing it)?

Health Sector

How does the health sector address environmental health in general and children’s environmental health specifically? Is there legislation to protect public health from environmental hazards and chemical risks? Is this legislation well-implemented? Is there any action to protect vulnerable sub-populations or children in particular? Are the medical, nursing and healthcare professional communities informed and/or trained on environmental or chemical threats to human health and specifically to children’s health? Are there health facilities that promote environmental health, chemical safety, or children’s environmental health? Describe the differences in approaches to environmental health in rural and urban settings. Is there a poison control center in your country or a toxicology unit or other entity that addresses toxic exposures in children? Where are
poisoned children seen and treated? Are chronic, low-level exposures to chemicals in children considered? Has any action been taken concerning the potential effects of Persistent Toxic Substances (PTS) or Persistent Organic Pollutants (POPs)?

**Environment Sector**
Discuss the country’s environmental and chemical safety legislation and its level of enforcement. Is human health considered by the environmental and chemical legislation? Is protecting human health part of the mandate of the environment ministry? Are there any specific considerations concerning children? Are specific media, such as water, air, soil, food, or chemical safety covered by environmental legislation? If so, list which media are covered and list any gaps. How does the environment ministry coordinate with other ministries, such as health or education? List the ministries with which the environment ministry coordinates. Has the country signed the international conventions/treaties dealing with toxic chemicals/pollutants (e.g., The Stockholm Convention on Persistent Organic Pollution, The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, and The Rotterdam Convention for Prior Informed Consent)? Have actions been taken in the context of these conventions/treaties? Has any consideration been given as to the considered potential impacts on children’s environmental health? What policy instruments are in place (e.g., global harmonization system - GHS, other)?

**Education**
What is the level of literacy in the country? How many children go to school, and up to what level? What percent of school-aged children attend school? Is attendance in the schools required up to a certain age? Are there differences in male/female school attendance? For elementary school, primary and secondary and high school, what are the opportunities for health and environmental education? Is there an environmental or a health curriculum taught in these grade levels? If so, are these taught in both rural and urban schools? Would environmental health education through elementary schools be possible and/or acceptable in the school systems? Are there any education campaigns for parents or children related to chemical hazards?

**Other pertinent ministry/sector**
If applicable, list other pertinent ministries or governmental agencies that deal with children’s health and the environment (e.g., in certain countries some of the environmental issues may be regulated through the ministries of agriculture, industry, youth, social welfare or others). In many countries there are ministries of culture, science, education, welfare, and family and youth issues that may play a role in the protection of children’s environmental health or promotion of chemical safety. What are the ministries or agencies at the national government level which would play a role in implementing a national action plan on children’s environmental health? List and describe the role they play.

Note: It may be useful to include a table with a more comprehensive listing of ministries and governmental agencies that deal with development (e.g. see UNITAR National Profiles suggested structure and contents).
SOCIETY ROLE

Communities
Do the governmental units at the community level (e.g. county seats, community or city governments) play a role in the protection of environmental health and, more specifically, children’s environmental health? If not, what role could they play at a local level to better protect children from environmental threats? Do they have the ability to pass local legislation? Are they charged with enforcing national legislation? Could they be enticed to carry out public information campaigns on children’s environmental health?

Non-governmental organizations
Do NGO’s play a strong role in building stakeholder input and public participation? What are the key NGOs (both national and international) involved in activities aiming at the protection of children’s environmental health, organizing national campaigns on children’s environmental health or promoting children’s chemical safety? If no NGO has been doing this, which ones could likely become interested in this area? What roles might they play?

Professional Associations
Do professional associations play a strong role in building stakeholder input and public participation? What are the key professional associations (both national and international) that would become involved in children’s environmental health? (e.g. pediatric, medical, toxicological, family doctors, occupational medicine, nursing, primary health care, public health, women’s health and any other societies) What roles do they play?

Academia
What academic institutions (e.g. academies, post-graduate schools) could promote children’s environmental health through research, advocacy, publications, medical education (of medical and post-graduate students and continuing medical education), development/use of children’s environmental history taking, and development/use of indicators? What role would each play?

Private sector
Are there any private companies that would likely be interested in promoting the health and safety of children in the country? For example, pharmaceutical, hygiene and cosmetic products companies, agricultural chemical companies, water companies, food and beverage producers? Considering always all ethical aspects involved, what roles could the private sector play in promoting children's environmental health (e.g., financing activities, public advertisements, educational campaigns, advocating in favor of national legislation).

SCIENCE

State of the science in the country in relation to CEH
Has anyone in the country conducted research and published results on topics related to environmental health or children’s environmental health? (e.g. on the risk factors mentioned above, on children’s settings, on specific topics such as chemical safety and poisonings). Name the country's science ministry or entities in the government that
conduct research and publish findings. Is environment, chemical or health legislation based on scientific findings?

Capabilities to conduct research
What institutions promote science and research in the country? Is the country participating in international research activities (e.g., multixxx studies)? Does the national government invest in research and development? What type of scientific publications are released in the country? Is financing available to support research at universities, hospitals, laboratories or other facilities? Which institutions would most likely be interested in research on children’s environmental health and chemical safety issues?

Research needs
List the top priority research needs around the topic of children’s environmental health and chemical safety in the country. Is research on these topics underway? Are there barriers to conduct this research and, if so, what would help overcome the barriers? What are the needs? What are the top three ways in which international organizations, other countries or other organizations could support research?

DATA AND REPORTING
Information systems and centers
Does the country have a centralized information gathering system on children’s health data? (e.g., health surveillance system, clinical case recording) Does the country have national, sub-national or private information centers, for example on health, demographics or environment? Does the country require reporting of certain pediatric diseases to support public health surveillance and disease prevention and, if so, how is that information gathered and where? Are there poison control centers in the country and, if so, do they record incoming and outgoing information in a harmonized manner? Is information collected on chemical effects on children, for example, pesticide poisonings? Does any entity in the country report indicators on environment or health? Does any entity in the country put out regular reports on disease, public health or environmental conditions? If so, how are they accessed by the public?

Data quality
The WHO national offices are most likely involved in data gathering on health, and local United Nations Children's Fund (UNICEF), United Nations Environment Programme (UNEP) and United Nations Development Programme (UNDP) offices probably work on information collection systems, as well. Do these offices judge data quality as good enough to be useful and representative? Are there other entities that collect data on health, environment or status of children in the country? Can the national work on Millennium Development Goals (MDGs) help to clarify and address barriers to data quality in the country?

COMMUNICATION
Avenues of communication
What are the most effective means for disseminating information in the country? (e.g., television, radio, newspaper, community activities, role-playing) Are these the same for
both rural and urban settings? If not, list by rural and urban. What are the most effective means for communication through schools, adult literacy programs, country or local governments? Are there other innovative means of communication, for example through local libraries, street theatres, vaccination campaigns, radio/TV educational “soap operas,” music, fairs or other local events?

**Success stories in communication**
Do you know of any local success stories in widespread communication on important topics related to health and the environment? (e.g., use of radio-based literacy programs targeting children in rural areas, that may increase adult and child literacy, lead to a decrease in child agricultural workers and improve matriculation in rural schools). Could these success cases repeat themselves, this time carrying a message about chemical safety and children’s environmental health?

**CONCLUSION**

**Summary of the country status of children’s environmental health and opportunities for action**
Given your findings, in a page or less, summarize your assessment of the country’s potential, capacity and interest to take action to improve the environmental health of its children. What specific actions in this area are recommended? What are the areas/issues for natural success? What are the areas/issues where urgent actions are required? What are the key barriers or areas that need to be addressed to achieve success? Who (individuals and organizations) are the key players? What are the national policies that need modification or promotion?

**ANNEXES**—please provide any samples of useful or illustrative materials, such as educational, awareness building, information gathering, data collection forms, educational programs, photographs, maps, charts, other.

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Annex B:

Terms of Reference to Develop Profiles of Children’s Health and the Environment (Sample)

INTRODUCTION

Children's environmental health is a rising concern among countries around the world. In order for countries to improve protections of children from environmental hazards, an assessment of country readiness for such action is being conducted. [INSERT COUNTRY NAME] is preparing a report profiling the status of children’s environmental health. The purpose of this report is to describe and analyze the current situation of the country on different aspects of public health from the perspective of environmental and chemical threats to the health of children. The main findings of the analysis may be presented at a national, regional or international meeting on the topic of children's health and the environment. A summary of this report may be prepared and published by [INSERT COUNTRY NAME], the World Health Organization or another entity. To develop this national profile, the environmental health unit [or relevant section or agency] of the Ministry of Health of [INSERT COUNTRY NAME] seeks the services of a consultant. For the purpose of the Terms of Reference the Environmental Health Unit of the Ministry or Health will be referred to as the EHU. The professional services provider will be referred to as the consultant.

TERMS OF REFERENCE AND ACTIVITIES

1. Convene Information and Planning Meeting

The consultant, in collaboration with the EHU, will convene a short preparatory meeting to provide information on the initiative, present the guidance materials and plan the gathering of information. After this, an initial working meeting (one-day long) will gather individuals with the experience and capacity to address policy, science, healthcare services, environmental and education issues in relation to the environmental -physical, biological and chemical-threats to the health of children. The meeting should be multi-sectoral and multidisciplinary in composition and should represent all the organizations within the country that are actually involved or should be involved in dealing with environmental and chemical threats to the health of children. Examples of sectors that should be represented in the meeting are the ministries of health, environment, and education; healthcare professional organizations; non-governmental organizations; national commissions for environmental health; and international organizations. (See Box 1)

The consultant will organize and facilitate the initial one-day meeting, with the goal of gaining input and responses to questions provided in the format found in Annex A of this guidance document.

The consultant will note the need for further information collection, follow-up and next steps after the meeting, keeping participants informed of progress and allowing opportunity for comment as the country profile is developed. It will also note actions underway as well as future possible actions that could be taken in the country to improve children’s environmental health.

The consultant will be responsible for the record of the meeting, list of participants with contact information, and will make this information available to the EHU.

Timing
The meeting must take place by [INSERT DATE].
(N.B. if more than one meeting will take place, the additional meeting dates should be listed in the terms of reference.)

Products
i. List of participants will contain the following information:
   — Complete name
— Professional title
— Job title
— Position
— Organization
— Mailing address
— E-mail address
— Telephone number
— Fax number

ii. Meeting agenda
iii. Background documents
iv. Summary of the objectives of the meeting
v. Report of the meeting

2. Draft and Delivery of Country Profile

The consultant will use information provided at the initial one-day meeting and other meetings required, as well as other reliable sources of information and follow-up inquiries to draft a Profile of Children’s Environmental Health.

The consultant will use the format provided in Annex A as an outline for the profile, following the order provided, using the lettered headings as subheadings in the written profile and offering text in narrative and paragraph form.

The consultant will provide a draft profile for review and comments to all of the participants of the initial meeting, offer ample time for review and comments, and incorporate the comments using his/her best judgment to ensure quality, relevance, and appropriate level of detail. The written profile will be a single-spaced document of 15 to 20 pages, in Times New Roman font, size 12.

The consultant will finalize the country profile, verify all references, list all acknowledgements and submit to the EHU the final profile in electronic format with, when possible, electronic links to references. The consultant will also proof, spell check and otherwise ascertain that the draft submitted to the project manager is in copy-ready form for printing and distribution.

Timing
A first draft of the document will be sent to meeting participants before [INSERT DATE], requesting comments within two weeks of receiving the document.

The final version of the document will be submitted to the EHU by [INSERT DATE].

Product
A final, copy-ready document submitted in electronic format to the EHU, 15 pages in length; single spaced, Times New Roman font, size 12 with verified references and electronic links to references, when possible. Copies will be sent to all contributors/contributing organizations.

3. Preparation of Country Presentation

The consultant will develop a 10 to 20 minute Microsoft PowerPoint slide show presentation on the main findings of the country profile and will provide an electronic copy of the presentation to the EHU by [INSERT DATE].
The consultant will discuss the presentation with the EHU and will agree to edits by the EHU to accommodate time and content requirements.

The consultant may be expected to give an oral presentation on behalf of the EHU and in representation of the other parties which participated in the development of the profile.

**Timing**
Submit slideshow presentation to EHU by [INSERT DATE].

**Product**
Microsoft PowerPoint slideshow 10-20 minute presentation of country profile, submitted in electronic format.

4. **Availability for Follow-Up**

The consultant will be available to discuss, clarify and respond to questions, with reasonable frequency, regarding the National Profile of Children’s Health and the Environment through [INSERT DATE].

**Fees**
The total contract amount is [INSERT SUM] for professional fees and related costs.

**Duration**
The contract is effective upon its signature until [INSERT DATE].

**Supervision**
[INSERT NAME, TITLE], of EHU.
Annex C:

Sample Agenda for National Stakeholders Meeting

1. Introductions
2. Background
3. Overview on National Profiles on Children's Health and the Environment
4. Introduction of the National Profiles format and discussion
5. Responding to the questions
6. Concluding statements
7. Next steps
8. Thank you and adjournment
Annex D

An example of Regional Summary

National Profiles on Children’s Environmental Health in Latin American and Caribbean Countries

In 2003, Argentina, Brazil, Canada, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Peru, Suriname, Uruguay and Venezuela developed initial country profiles of children’s environmental health to assess their own abilities and willingness to improve the situation of children at local and national levels. The country profiles can be found on the Internet at the Pan American Health Organization’s Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS/OPS) website (www.cepis.ops-oms.org). Publication of a summary is underway.

The profiles revealed that the countries were ready to engage in children’s environmental health. This was demonstrated by government statements in the national profiles and by the successful coordination among various government entities in the elaboration of the national profiles at national and local levels, as well as other sectors of society, such as academia, non-governmental organizations and civil society. While none of the countries had a program specifically targeted to children’s environmental health, there was a strong recognition by governments that children needed clean environments in which to live. All of the countries asserted that children’s environmental health was a key concern, that children were negatively affected by environments in which they lived and that the situation was exacerbated by poverty, malnutrition and inequality. Countries pointed out that they were lacking coherent, integrated development policies that struck a balance between development, health, and environmental objectives. Nearly all highlighted the economic strain of the region making it harder to prioritize the many concerns relating to the health and well-being of their populations. All understood the importance of children to the long-term development of countries and all identified ways to achieve improvements. Some countries thought they were well situated, with new laws, ministries and renewed energy to address children’s environmental health. Countries highlighted the positive impact of international agreements on environment, health and children, not only on environmental protection and child rights but also in strengthening community participation, increasing legitimacy of non-governmental organizations and improving the transparency of politics, leading to improved governance in the Latin American and Caribbean region.

The countries summarized their profiles by identifying challenges to improve children’s environmental health. They suggested initial steps, many of which were in common across the region. One challenge cited by nearly all countries was the overarching need to learn how to coordinate across sectors of society, integrating efforts of health, education, labor, environment, science and technology, and social welfare, among others. The countries suggested that the first step would be to adopt a common goal around which the various sectors would engage. The Millennium Development Goals already helped to focus the region on key areas for attention to improve the lives of children. Coordination
on children’s environmental health across the region, strengthened by international cooperation, would advance immediate and long-term improvements in children’s environmental health in the countries and across the region. These conclusions offer areas for collaboration and assistance from the international development community as well as direct foreign assistance opportunities for cooperation among countries in the region.

(Note: In 2005, xxxx countries have elaborated national action plans on the basis of the profiles prepared).
Annex E

An example of Regional Summary

WHO Africa Region National Profiles on Children’s Environmental Health

In 2003, the Republic of Congo, Benin, Mozambique, Zimbabwe, the Seychelles and Ethiopia developed initial national profiles of children’s health and the environment, with the goal of assessing country abilities and willingness to improve the situation of children’s environments and health at local and national levels. Information from three other countries, Gabon, Kenya and Botswana was compiled in an attempt to provide examples of children's environmental health in ethnic minority groups. This work was done using the format provided in Annex A. WHO provided financial and technical assistance, as did the U.S. Environmental Protection Agency. The Swedish Expertise fund provided financial and technical assistance, including an international consultant. The country profiles are available at http://www.afro.who.int/.

The six countries asserted that children’s environmental health was a key concern, that children were negatively affected by environments in which they lived and that the situation was exacerbated by poverty, malnutrition, inequality and, in some countries, conflict, war and military unrest. The countries conveyed great interest to engage in protecting children’s environmental health and expressed desire to work across ministries and with various sectors of society, such as academics, non-governmental organizations and civil society. While none of the countries had a program specifically targeted to children's environmental health, there was a strong recognition by governments that children urgently needed clean environments in which to live, grow, learn and play. Some countries already had national plans for the environment or national programs for children that targeted specific environmental concerns. A primary concern of the six countries was the contexts in which children's environmental health priorities must be considered. The countries emphasized that poverty, inequity, food insecurity, and HIV and AIDS were highly significant contributors to children's vulnerability to environmental risks, especially in degraded environments. They pointed out that, conversely, a degraded environment exacerbates the conditions of poverty, inequity, food insecurity and the prevalence of HIV and AIDS. They also mentioned the situations of conflict and war that lead to increased vulnerability of children and directly contribute to environmental degradation.

Countries highlighted a need for funding for projects to improve children’s environmental health, develop and strengthen human resources on the topic, and increased infrastructure, such as standards for pesticide residues in food, health surveillance mechanisms, improved laboratory capacity and poison control centers. Nearly all six countries highlighted the economic strain of the region that is making it harder to prioritize the many concerns relating to the health and well-being of their populations. Yet, all understood the importance of children to the long-term development of countries. The countries summarized their profiles by offering areas of attention to improve children’s environmental health. Priority actions included boosting cross-sectoral collaboration, increasing community participation, finding technical and
financial support, growing political will to improve environmental and environmental health conditions, and improving design and implementation of environmental and environmental health legislation. While the challenges in the WHO Africa region countries were great, strides can be made to improve the environmental health of children and reach toward attainment of the Millennium Development goals.

(N.B.: This summary will be expanded in 2005 as a result of the new national profiles prepared in 2004 and 2005)