

The EH IQC Team

RTI International

Water supply and sanitation, solid and hazardous waste management, indoor and ambient air pollution, vector control and IVM.

www.rti.org

International Resources Group

Natural resource management, environmental policy, environmental management systems.

www.irglttd.com

PA Government Services

Energy sector reform, transport systems, clean production, industrial and urban pollution.

www.paconsulting.com

University and Other Partners

Columbia U. Inst. for Climate Prediction

<http://iri.columbia.edu>

Intl. Ctr. for Insect Physiology and Ecology

www.icipe.org

Intl. Water Management Institute

www.iwmi.cgiar.org

Liverpool Associates in Tropical Health

www.lath.com

The Manoff Group

www.manoffgroup.com

Medical Research Council of South Africa

www.mrc.ac.za

Oak Ridge Associated Universities

www.oraui.org

Swiss Tropical Institute

www.sti.ch

Tulane U. Dept. for Intl. Health and Development

www.tulane.edu/~inhl/inhl.shtml

University of Durham

www.dur.ac.uk

Wildlife Conservation Society

www.wcs.org

Points of Contact

Gene Brantly, RTI International

EH IQC Manager

E-mail: epb@rti.org

Phone: 202.974.7801

Myles Elledge, RTI International

EH IQC Task Manager

E-mail: melledge@rti.org

Phone: 919.541.8739

John Borrazzo, USAID/Washington

EH IQC Cognizant Technical Officer

E-mail: jborrazzo@usaid.gov

Phone: 202.712.4816



RTI International (www.rti.org) is an independent, nonprofit organization dedicated to conducting research and development that improves the human condition. With a staff of more than 2,500 people, RTI offers innovative research and technical solutions to governments and businesses worldwide in the areas of health and pharmaceuticals, advanced technology, surveys and statistics, education and training, economic and social development, and the environment. RTI maintains nine offices in the United States, five international offices, one international subsidiary, and one affiliated nonprofit, as well as project offices around the world.

RTI International is a trade name of Research Triangle Institute.



Environmental Health IQC

Continuing over 20 years of expert support to USAID programs in Environmental Health



Founded in 1958 and with over 2,500 staff worldwide, RTI is a recognized leader in environmental science, engineering, policy, and program implementation and evaluation.

As a partner in USAID's Water and Sanitation for Health (WASH) Project and Environmental Health Project (EHP), RTI has supported international environmental health initiatives for over 20 years, earning a reputation for technical excellence, objectivity, and responsiveness.

Our Environmental Health IQC team provides the implementation capacity of three global companies coupled with the specialized expertise of leading universities, institutes, and smaller firms.





What Is Environmental Health?

Environmental Health (EH) is the science and practice of reducing exposure to infectious and toxic agents that cause disease and to physical forces that cause injury. It is a public health discipline that focuses on preventing diseases and injuries related to the environment.

EH Problems in Developing Countries

- Malaria kills almost 1 million children per year. In many parts of Africa, an unprotected child is bitten on average once or more each night by an infective mosquito.
- Of all childhood communicable diseases, 63% can be attributed to the joint effects of malnutrition, indoor smoke from solid fuels, and unsafe water, sanitation, and hygiene.
- Two million children die each year from acute lower respiratory infections (ARI). Over 35% of ARI cases are caused by exposure to indoor smoke. In a study in South Africa, 70% of infants with ARI had daily exposure to heavy smoke indoors.
- India has 1% of the world's vehicles but 6% of reported traffic accidents. Almost 85% of the world's traffic accident victims are in low- and middle-income countries.
- In China, poor air quality in urban areas causes excess morbidity and mortality with a cost estimated at 5% of the country's GDP.

- An estimated 80% of urban children in developing countries ages 3 to 5, and 100% of those under 2 years, have blood lead levels exceeding 10 µg/dl.
- In Bangladesh, arsenic in drinking water will cause 200,000–270,000 deaths from cancer.

What Can Be Done?

Control Mosquitoes and Other Vectors

Many tools work: chemical and biological pesticides, bed nets, soak pits and drainage to eliminate breeding sites, and repellants. Selecting the right combination depends on the vector species, the environmental setting, and associated human behaviors. An effective program requires organized public-sector capacity and private action, based on accurate information and community involvement.

Reduce Exposure to Indoor Smoke

Children exposed to smoke from heating and cooking fires with wood, dung, and coal have a higher risk of ARI. Using a stove with a flue, using liquid fuel, improving ventilation, and limiting the time children spend close to a fire reduce exposure to smoke. Field trials are under way to determine by how much exposure must be reduced to lower the risk of ARI.

Manage Medical and Hazardous Waste

Hospitals and clinics can greatly improve infection control with simple steps: segregate infectious waste from trash, separate sharps from paper and bandages

(bury the former, burn the latter), channel liquid waste into secure covered pits, train staff on best practices, and supervise those who dispose of the waste.

Prevent Common Injuries

Helmet and seat belt laws, traffic controls, vehicle inspections, separating pedestrians and vehicle traffic—these can substantially reduce traffic injuries if enforced in congested cities.

Reduce Ambient Air Pollution

The first step is to understand the types of air pollution sources and their relative importance in affected areas. Then a combination of policy, engineering, regulatory, and public information actions can be used to reduce pollutant levels.

Reduce Exposure to Toxic Chemicals

Pesticides, lead, mercury, arsenic, chromium, even radiation—people are exposed to toxic chemicals from diverse sources, many connected with livelihoods. Reducing exposure requires understanding the sources and pathways, as well as economic and social factors.

Strengthen EH Staff and Systems

EH staff work on the periphery, often in municipal governments or in a district-level department of health, environment, agriculture, or tourism. They address diverse problems and constituencies, yet have modest training and stature. Budgets are cobbled together from multiple sources with

confused lines of accountability. EH training, supervision, and career paths need to be improved.

About the IQC

- The Environmental Health IQC is the preferred USAID contract vehicle for environmental interventions that are intended to improve public health.
- The Environmental Health IQC supports environmental, behavioral, and policy interventions to prevent infectious diseases, chronic diseases, and injuries caused by environmental conditions.
- A USAID mission may obligate Field Support funds to an existing global task order or prepare a new task order for the specific services it requires.
- The contract can accept new task orders until September 2009 for work to be completed by September 2012.
- The contract may be used to access technical support in the areas highlighted in this brochure and also in
 - Water supply and sanitation
 - Solid waste management
 - Population, health, and the environment
 - Health impacts of global climate change
 - Emerging infectious diseases
 - Urban environmental health