PATH

US Department of Defense and PATH

Working together to advance global health innovations

The global health work of the US Department of Defense is primarily focused on protecting service members working in areas with specific disease threats and promoting stable societies abroad. PATH collaborates with DoD to address critical global health challenges when the innovations DoD is developing can be used to improve the health of people around the world. Together and with other public and private partners, PATH and DoD adapt, test, and expand access to tools and technologies—such as new vaccines and diagnostic tools—that can reduce illness in the world's most vulnerable populations.

SUCCESSES SUPPORTED BY PATH/DOD PARTNERSHIP

VACCINES

- Development is under way for affordable **vaccines against *E. coli* and *Shigella***, which together cause almost one-third of the nearly 600,000 deaths of children under five worldwide from diarrheal disease each year.
- Key evidence was generated on specific manufacturing technologies for developing **thermostable vaccine formulations**, expanding the possibilities for certain vaccines to be transported and stored for extended periods of time outside of the refrigerated "cold chain."
- A **market assessment of the potential for low-cost and effective vaccines** concluded that *E. coli* vaccines have an estimated annual revenue potential of more than US$600 million ten years after global launch, demonstrating the opportunity for industry investment in vaccine development.

DEVICES

- The **MSR® SE200™ Community Chlorine Maker** gives low-resource communities sustainable access to safe, affordable drinking water by creating a chlorine solution using table salt, water, and a rechargeable battery. Support from DoD was provided to MSR® to develop the push-button technology that makes the MSR® SE200™ portable and easy to use.

Health Care Areas:
drinking water safety, malaria, diarrheal disease, vaccines

Facts presented are based on the latest available estimated data at the time of publication.

PATH/Gena Morgan

Malaria vaccines a long-term focus for US military

For more than three decades, DoD researchers have played a key role in the development and testing of malaria vaccines. The Walter Reed Army Institute of Research was an early partner in the development of the RTS,S malaria vaccine candidate in the 1980s. Following the agreement between PATH and GlaxoSmithKline in 2001 to develop RTS,S (also known as Mosquirix™) for use in young children, DoD again became involved through the Kenya Medical Research Institute / Walter Reed trial site in Kenya—1 of 11 sites across Africa that ran the phase 3 trial. The vaccine has been recommended for large-scale pilot implementations by the World Health Organization.

IMPACT: RTS,S, the world's most clinically advanced malaria vaccine candidate, demonstrated protection for children and infants against clinical malaria for three years after first vaccination.

PATH is the leader in global health innovation. An international nonprofit organization, we save lives and improve health, especially among women and children. We accelerate innovation across five platforms—vaccines, drugs, diagnostics, devices, and system and service innovations—that harness our entrepreneurial insight, scientific and public health expertise, and passion for health equity. By mobilizing partners around the world, we take innovation to scale, working alongside countries primarily in Africa and Asia to tackle their greatest health needs. Together, we deliver measurable results that disrupt the cycle of poor health. Learn more at www.path.org.

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