

TECHNOLOGY SOLUTIONS FOR GLOBAL HEALTH

Handwashing station

Enabling hand hygiene everywhere for everyone

CONTEXT

Each day diarrhea kills more than 1,500 children under five. Research has shown that handwashing is the most cost-effective and powerful intervention—preventing more than 40 percent of cases of diarrheal disease and other illnesses. Effective hand-washing stations are critical to this effort. Existing hand-washing station options are often expensive, unsustainable, and difficult to construct, and/or enable recontamination because most require users to handle a dirty tap after washing.

TECHNOLOGY SOLUTION

Following initial landscaping and user evaluations, PATH and MSR Global Health are working to develop an innovative handwashing solution to a long-running challenge. The goal is to develop a practical, easy to use, low-cost handwashing station that can be used by all—including children—to provide a highly functional and appropriate handwashing experience.

Alpha prototypes received user feedback in refugee camps, hospitals, health facilities, and schools in Rwanda and Kenya. Learnings from the user evaluations informed the target design specifications:

- Low cost
- Easy to use
- Ease of production and repair
- Compact for storage and distribution
- Optimized flow rate to conserve water while still covering hands
- System to manage waste water



Hand-washing station prototype in use at Mugombwa refugee camp, Rwanda. Photo credit: PATH/Jesse Schubert

CURRENT STATUS AND RESULTS

Current funding supports the build of two prototypes that reduce the cost of the leading product option and integrate user feedback. These concepts are being developed with the goal of rapid-deployment in acute disaster relief settings and use in health care facilities, schools, or communities.