

The Safe Water System Project : Safe Drinking Water and Hygiene in Kenyan Schools

Background

An estimated 884 million people worldwide lack access to an improved water source. Hundreds of millions more drink contaminated water from improved sources because of unsafe water treatment and distribution systems and unsafe water storage and handling practices. Every year, there are approximately 2.5 billion cases of diarrhea, killing an estimated 1.3 million young children. The Safe Water System (SWS) is a water quality intervention proven to reduce diarrheal disease incidence in users by 22-84%. The SWS includes: 1) water treatment with chlorine solution at the point-of-use; 2) storage of water in a safe container; and, 3) behavior change communication.

Safe Water and Hygiene in Schools



Kenyan schoolchildren using WaterGuard to treat water for handwashing

Safe drinking water and hygiene are essential to reducing Kenya's diarrheal disease burden. In May 2005, CARE Kenya, CDC, and Emory University implemented a school-based safe drinking water and hygiene intervention, using locally produced dilute chlorine solution socially marketed by the non-governmental organization Population Services International and handwashing education, in 45 rural primary schools in Nyanza Province, western Kenya.

In February 2006, the partners evaluated the impact of the intervention on students' knowledge and parents' adoption of safe water and hygiene practices in the home. The results of the evaluation showed: 1) an improvement in students' knowledge of correct water treatment procedure and knowledge of when to wash their hands; 2) an increased number of parents who treated their water at home after the pilot project than before (14% as compared with 6%); and, 3) a 35% decrease in school absenteeism.

As a consequence of the documented success of this pilot program, the water in schools initiative is currently being scaled-up in Nyanza Province by CARE and the Center for Global Safe Water (CGSW) at Emory University. Funding for the pilot project and evaluation was provided by the Coca-Cola Africa Foundation and USAID. Funding for expanding the program over a 5-year period is currently being provided by Coca-Cola International and the Gates Foundation working in partnership with WaterPartners International, Millennium Water Alliance, and Global Water Challenge. Within the first 2 years of expansion, safe drinking water and hygiene interventions were implemented at 285 schools; with the potential of reaching 1,500 schools by the end of the 5-year period, dependent upon the recommendations and success at the current intervention sites. Monitoring and evaluation efforts are being undertaken by the Center for Global Safe Water at Emory University.

This project is an excellent example of how evaluation of a successful pilot program can lead to expansion of an intervention to reach many more students and their families. CDC has developed a curriculum as a guide for schools interested in implementing safe water and hygiene programs for their students.



Schoolchildren using WaterGuard treated water for drinking

For more information, please visit www.cdc.gov/safewater