



## GENERAL DISTRICT MEETING: The Importance of Safe Water, Sanitation & Hygiene for School and Community Health

### Introduction

In January-April 2007, Great Lakes University of Kisumu (GLUK) and Emory University collected rigorous baseline data from 185 primary school-communities in divisions within Suba, Rachuonyo, Kisumu and Nyando as part of the SWASH+ program. The baseline provides information on over 10,000 school aged children in almost 5,000 households. A cross-sectional analysis to quantify the effect of household and school water, sanitation and hygiene on diarrhea and absenteeism in school-aged children was conducted. While this data collection was done to establish a baseline for measuring the efficacy of the SWASH+ program, it points to the more general impact of access to water and sanitation and hygiene promotion on child health and educational performance.

### Research

GLUK and Emory looked at a long list of variables including: school water, sanitation and hygiene facilities and their quality; general school facilities; household demographics and socio-economic status; household water, sanitation and hygiene facilities; and child demographics. Indicators that were significantly related to the likelihood of diarrhea or absenteeism were identified and then run in a combined model to find out which ones are most important in determining absenteeism and diarrhea. Multi-variate results control for household economic status, parental education, household demographics, child age and child sex.

### Findings

The results demonstrate that **poor school and household level water, sanitation and hygiene have an important negative impact on child health and education.**

- Children in households with hand washing facilities (water and soap together) are 25% less likely to miss school.
- Children from a home with a latrine are 21% less likely to miss school.
- Children in households with a closer water source are significantly less likely to miss school.
- Children in schools that ever provide water for hand washing are 30% less likely to miss school.
- Children in schools that are closer to the pupil:latrine ratio recommended by the Kenyan Government are significantly less likely to miss school.
- Children in schools with better maintained latrines (less smell, flies and feces) are approximately 20% less likely to miss school.
- Children involved in water collection at home are 35% more likely to experience diarrhea.
- Children in households that report treating their drinking water are over 30% less likely to suffer diarrhea.
- Children in a home with a hand washing station are 35% less likely to have diarrhea.

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Based on the **SWASH+ Research on Menstrual Management: Final Report** by the Center for Global Safe Water at Emory University (2009), available at <http://www.swashplus.org>.

SWASH+ is a five-year applied research program to identify, develop and test innovative approaches to school-based water, sanitation and hygiene interventions in Nyanza Province, Kenya. Implementing partners are CARE, Emory University, the Government of Kenya, the Kenya Water for Health Organisation (KWAHO), the Great Lakes University of Kisumu (GLUK), and Water.org (formerly Water Partners International).