

Clear Cambodia Uses CBT Kit in School WASH Project



Clear Cambodia helps rural Cambodian people improve their health through access to safe water, sanitation facilities, and a healthy, hygienic environment.

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Clear Cambodia's Battambang staff use the CBT to test open well water to ensure safe water quality

About the CBT

The Aquagenx Compartment Bag Test (CBT) is a simple, portable, quantitative water quality test kit that lets anyone, anywhere detect *E. coli* bacteria to determine if water poses a health risk.



CBT I Kit includes 10 tests.

Challenge

Clear Cambodia's School WASH Project has installed water filters in 91 schools. In addition to water filters, the project also installs hand washing stations, provides sanitation products and conducts workshops on health and sanitation. Because the 91 schools are in rural, remote locations, they need a convenient, portable method to test raw water sources for *E. coli* bacteria in order to assess the health risk of water.

Solution

The School WASH Project adopted the Aquagenx Compartment Bag Test (CBT) because it is easy to use with little training and does not require electricity, labs, or expensive, cumbersome equipment that is difficult to deploy in rural areas. In addition to measuring *E. coli* with the CBT, the project also uses other methods to test for total coliforms, pH and turbidity in sources such as lakes, ponds and wells.

Test Results

Quantitative test results obtained with the CBT Kit reveal raw water sources contain varying levels of *E. coli* bacteria. Water that is filtered through BioSand filters and water accessed through taps test negative for *E. coli* bacteria and is safe to drink. Clear Cambodia reports the CBT's color-change test results make it simple to score the Most Probable Number of *E. coli* in 100 mL samples, and they are a powerful visual tool for school communities to adapt good hygiene practices.

Conclusion

Vann Chhorvay Vanny, School WASH Project Manager, says "The CBT builds trust for our beneficiaries by providing evidence that makes them confident our water filters generate safe drinking water."

"Because of its efficiency," continues Vanny, "the CBT enables our staff to test water on-site rather than having to collect samples to be sent to a lab."

"Clear Cambodia will continue using the CBT as our ongoing microbiological water quality test because it helps us guarantee the quality of water and tells us which waters are safe and which are not. Safe drinking water is essential in school environments, and the CBT is a practical way to prevent the spread of waterborne diseases in school children."