



JALISCO FIELD TRIAL WORLDWIDE WATER GROUP

Overview

This study was conducted in the western part Mexico in the state of Jalisco just northeast of Guadalajara. The region is known to have profoundly contaminated water leading to the highest incidence of waterborn illness in Mexico. The water used in the region comes from the primarily available source, the Rio Santiago River. Due to the problem and the rural location, Puralytics' SolarBags were a good solution to bring improved drinking water safety to the community.

Trial

The study was approved by and conducted in conjunction with the University of Guadalajara. SolarBags were distributed to 147 households to be used over a period of 12 weeks in 2013. The primary caretaker in each home was given in person instructions and pictorial directions on how to use the bag. After water was treated, a jerrycan was used for clean water storage. A control group of 146 homes were also included in the study. This group only received a jerrycan. Volunteers surveyed both groups and performed a physical inspection of the bags on a weekly basis for a total duration of 12 weeks.





Outcomes

The results of the field use evaluation showed a very high social acceptability and subjective efficacy of the SolarBag. More than 70% of users listed any changes were needed for the SolarBag.



Health

Survey participants noted lower rates of diarrheal incidence and prevalence overall and primarily for children under 5 years of age when using the SolarBag in comparison to more conscientious water use.

Outlook

This study assessed the social acceptability and practical effectiveness of using the SolarBag in this remote region. The qualitative results from the study was very positive and users felt more confidence in the safety of their water from the improved visual appearance and taste. Lessons were learned to better define quantitative benefits for future studies.

Adoption

During adoption of the study, participants were requested to use the SolarBag as their primary source of drinking water. After the study, the majority of the users desired to continue use of the SolarBag for safe, reliable, easy-to-use, and effective water purification device.

Aesthetics

A dominant fraction of the study population gave positive testimonials to the water taste and clarity when used consistently.



Partners

Thank you to all of the participants in this Field Study. Puralytics produced the SolarBags which were delivered and surveyed by the participants from the University of Guadalajara.