

Haitian Filtration

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Abstract

The goal of our project is to reduce the number of Cholera cases in the Artibonite Valley in Haiti. The goal will be achieved through the implementation and education of simple water filtration methods. This results in the Haitian community learning through peer influence how to construct an effective water filtration system. In using the water filtration system, the amount of cholera cases was reduced by 85% and the awareness of the effects of the Cholera disease was greatly increased.

Background

- Since 2010 earthquake, 8,361 cholera deaths.
- Cholera is water borne, a major epidemic, due to lack of clean water.
- Fabric can be used to filter biomaterials, including the Cholera strand.

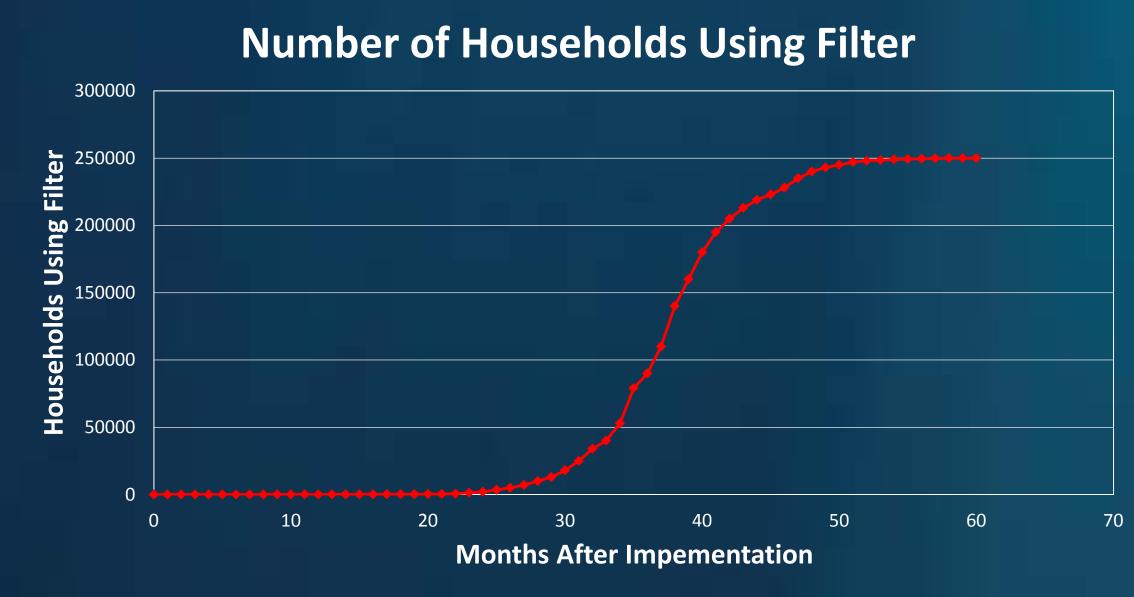
Project Goals/Objectives

- Reduce the number of cholera cases in the Artibonite Valley in Haiti.
- Increase Haitians access to clean water.
- Education on how to effectively utilize the water filters that we have designed.
- Educate the Haitians on the effects of Cholera.

Methods/Process

- Travel from house to house, educate on the spread of Cholera and symptoms.
- Educate Haitian people on easily made water filtration systems.
- Most effective when made out of sand, gravel, charcoal, and heavily available tshirts.
- Impurities pass through several filter layers, rids water of both biological and material contaminants.
- Biggest problem: discovering the resources of an average Haitian person has on a daily basis.
- Coordinating with the Haiti Advocacy Working Group (HAWG), providing our project with necessary authority.

Cases of Cholera (In Thousands) (Population Properties of Cholera (In Thousands) Cases of Cholera (In Thousands) (In Thousands) (In Thousands)



E. coli colony growth before and after filtration.

Conclusions/Recommendations

- Completed successfully, the incidence rate of Cholera infections diminished to 85%.
- Teaming up with HAWG, our team achieved influence, worked directly with people of the Aritbonite Valley.
- In working together, Haitian people are enabled to replicate results, creating a self-sustaining community.

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Number of Households Using Filter