The Women of El Fortín

A typical day for a woman in El Fortín begins by waking up at 5 am to light a fire used for cooking breakfast for her family. The fire is in an open pit, built with wood and started with any available material such as plastic or trash. The fire may be situated directly in or in close proximity to the house. This fire requires constant maintenance in order to maintain a consistent heating rate. While cooking the women are constantly inhaling smoke hazardous to their health. Cooking consumes several hours of their day, so the women are forced to multitask their household chores, childcare, and cooking. Both the women and young children are being exposed to this hazardous smoke. At the end of the day, the women will go to bed only to repeat the process the next day.

To learn more or get involved...

This project is just one of several occurring in developing nations. The World Health Organization and several other governmental and non-governmental agencies are trying to tackle this global health problem. The WHO has a great article “Fuel for Life” available on their website. To become involved in the CSU project, please visit our website listed at the bottom of this page. Any help is much appreciated and will go towards a great cause of improving the lives of families.

Environmental and Radiological Health Sciences
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http://www.cvmbs.colostate.edu/erhs/Nicaragua/index.htm

Nicaragua Cook Stove Project
Colorado State University
Department of Environment and Radiological Sciences
The Nicaragua Cook Stove Project started in 2007 by a group of undergraduate students at CSU who collaborated with a local non-profit group Trees, Water, and People; a Nicaraguan cook stove manufacturing company, Proleña; and a woman’s organization in Nicaragua, Casa de la Mujer. Together they were able provide subsidized cook stoves that would replace their open pit fires to over 100 families in the community of El Fortín, Nicaragua. The undergraduate students, along with CSU faculty, developed a ongoing study which assessed the health improvements of the community as well as evaluated the improved smoke exposure from toxic agents such as carbon monoxide.

Indoor Air Pollution
The World Health Organization estimates that 1.5 million people die a year due to exposure to Indoor Air Pollution. The majority of the exposures are occurring in homes burning wood, feces, plastic, and any flammable material as their main source for heating and cooking. Breathing in these materials after they have been combusted can lead to a myriad of detrimental health effects: lung cancer, cataracts, pulmonary diseases, cardiac complications, and et cetera. This exposure has been said to be equivalent to smoking two packs of cigarettes a day. Simple interventions, like a chimney, can help improve the lives of millions across the

Now and the Future
The project is currently planning its third return visit this December to the community of El Fortín. This time 5 undergraduate students will be attending alongside CSU faculty and support staff. The group will be following up with the physical conditions of the new stoves, while still assessing the exposure to smoke. Other specific health indicators, such as blood pressure, will be taken allowing for comparison from previous years of the study. The continued involvement between El Fortín and CSU has helped to construct a program that is positively affecting the lives of over 100 families.