

Around the world, millions of lives are lost each year due to water crisis. Ready Set Drop is a fundraising and awareness campaign for these emergencies. Our solution is the HydroPack™. It's a product that provides communities in need with immediate hydration in the aftermath of a disaster. It's a cost-effective and efficient solution for people without clean water.



Ready

Raise money to acquire HydroPacks for disaster relief situations



Set

Stockpile HydroPacks in preparation for immediate distribution



Drop

Deliver HydroPacks to hydrate communities in need

Disaster Aftermath: A Global Problem

Natural disasters can happen anywhere with little or no warning. When they do, they threaten community water sources and jeopardize community health by destroying vital pipelines or existing sanitation systems, allowing the introduction of contaminants into the drinking supply. As a result, disaster-struck communities often become victims to the spread of waterborne disease and geographic displacement.

Humans can only live for a few days without hydration. In fact, many deaths occur in the aftermath of a disaster rather than during the initial incident, leaving disaster-struck communities without potable water to face a slow and troublesome recovery.

The early stages after a disaster are the most critical. Communities with access to immediate hydration solutions at the onset of a disaster are better able to rebuild, recover and move forward. Too often, this leads to reliance on air-shipped bottled water as the primary response strategy in a disaster relief situation.

Although bottled water is thought of to be reliable and safe, it's also costly to transport and often difficult to deliver. In addition, bottled water produces excessive waste. In the wake of Hurricane Katrina and the tsunami in Southeast Asia, millions of bottles were distributed to disaster zones leaving behind considerable and unnecessary waste. We're ready for an innovative alternative and the HydroPack offers this opportunity.

Ready Set Drop: A Campaign for the HydroPack

Ready Set Drop is the digital media campaign raising awareness and funds toward the HydroPack with a goal to make it a global tool for immediate intervention in disaster relief situations.

Contributors will provide funding for the acquisition and delivery of 250,000 HydroPacks, which will be shipped to International Relief and Development in preparation for disaster relief.

November 2012 - June 2013

www.readysetdrop.com

info@readysetdrop.com

facebook.com/readysetdrop

twitter.com/readysetdrop

The HydroPack: An Effective Solution

The HydroPack is a single-use emergency water filter that delivers 500 milliliters of hydration from virtually any water source. When a HydroPack is dropped in a polluted source, water is filtered as it is drawn through the membrane overnight by osmosis, mixing with electrolytes and nutrient-rich powders to create a safe, flavored and life-saving drink.

Technology Meets Design

The HydroPack uses a unique cellulose membrane that provides the highest degree of filtration possible. This paper-thin barrier – developed by HTI and made from Eastman's cellulose acetate – blocks dirt, bacteria, viruses and other contaminants with a success rate that exceeds EPA standards for water purification. Once water is drawn in, the HydroPack's protective membrane eliminates the possibility of recontamination. The nutrient powder inside produces an osmotic pressure that naturally draws water in through the membrane. HTI's filtration process is known as forward osmosis and is identical to the process plants use to pull water into their roots. Eastman and HTI have collaborated in bringing together a brilliant technology and a thoughtful design to create the safest and most reliable mobile water filtration system available.

With an effective technology in order, HTI and Eastman sought the help of the design community in refining the idea for a more impactful end product. Modern Edge of Portland worked directly with communities in need to provide ethnographic research that would help identify communications problems and solutions. RKS Design took these ideas and helped shape an integrated approach between technology, design and implementation. Together, these collaborators have come up with a solution that is truly innovative in response to some of the most difficult challenges in any disaster relief effort.

Saving Cost

The HydroPack is a self-contained system that utilizes water at the source without power or maintenance. Because the pouches are shipped empty, they equate to 1/15th the cubic weight of moving water. When airlifted, one helicopter full of HydroPacks can deliver the same volume of hydration as 15 helicopters of bottled water. HydroPacks are airlifted at 7% the transportation cost compared to water. The acquisition and delivery of this hydration solution provides an enormous cost savings for governments and relief organizations.



Saving Time

Timing is critical in a water crisis. Communities need fast and direct access to safe hydration in order to keep people healthy and allow for a focused effort on the repair of a damaged infrastructure. Unlike bottled water, HydroPacks can be safely air-dropped directly into a relief site. This can be the difference between life and death in crisis areas where relief access is limited or restricted. Ensuring that HydroPacks are ready for delivery before disaster strikes will guarantee that victims have early access to healthy hydration as they begin the first stages of recovery.

Saving Lives

With a HydroPack intervention, hydration is brought to the people in need faster and more directly. The time, effort, and cost saved in this process can then be put to aid in other areas of the relief effort.

The HydroPack's nutrients provide victims with an important energy source when food is scarce. It replenishes lost electrolytes from vomiting and diarrheal illnesses that result from ingesting contaminated water. Children are particularly at risk for sickness related to water contamination. The sugars and vibrant color in each pouch make the HydroPack a drink that is not only pure and healthy but attractive and flavorful. HydroPacks prevent death and enable life, keeping disaster victims healthier and better equipped for recovery than any alternative hydration option.

Collaboration for Social Action

Ready Set Drop bridges a gap between product design innovation and social action. Contributors address this pressing global need while bringing communities suffering from water crisis an effective hydration solution. The campaign has partnered with International Relief and Development (IRD), a Washington D.C.-based, nongovernmental organization that will receive the donated HydroPacks for pre-positioning and delivery to disaster-struck communities.

About Our Partners

[International Relief and Development](#) is a nonprofit, nongovernmental organization responsible for implementing relief, stability, and development programs worldwide. IRD's mission is to reduce the suffering of the world's most vulnerable groups and provide the tools and resources needed to increase their self-sufficiency. Specializing in meeting the needs of communities emerging from conflict or natural disaster, IRD partners with donors, local organizations, and many others to deliver sustainable services in agriculture, governance, health, and infrastructure.

[Design Forum/PDX](#) is a Portland, Oregon-based resource organization that celebrates design. The nonprofit supports creativity at every stage from inspiration to final product. By identifying creative opportunities and providing new tools for the design community, Design Forum/PDX embodies a pervasive drive to discover, collaborate and exchange ideas.

[Hydration Technology Innovations](#) is the developer of the most advanced form of water and wastewater filtration membrane technology in the world. HTI has more than twenty years experience in research and development of advanced separation membrane manufacturing, and water filtration and recycling. HTI is the global leader and pioneer in the manufacture of commercial Forward Osmosis membrane material, and a global leader in membrane filtration wastewater treatment systems integration and installation.

[Eastman Chemical](#) is a global specialty chemicals company that produces a broad range of advanced materials, additives and functional products, specialty chemicals and fibers that are found in products people use every day. As a world leader in the diverse markets it serves, Eastman is focused on delivering innovative and technology-based solutions while maintaining its commitment to safety and sustainability.



25,000 HydroPacks were taken to Western Kenya for a pilot demonstration in 2011