

SlingShot – Segway Inventor Dean Kamen is Working to Solve the World's Water Crisis

“We can empty half of all the beds in all the hospitals in the world by just giving people clean water.” – Dean Kamen

It's hard to believe, but it's true. Waterborne illnesses are a growing problem, killing more people now than ever before. Waterborne illnesses are now killing 3.4 million people a year, most of them young children. The majority of these deaths could be prevented, just by giving people access to clean water. For the majority of waterborne illnesses, no vaccine is available, and even if they were, vaccines carry with them serious risks of injury, including death. By contrast, there is no risk inherent in drinking clean water; there are only benefits.

On Our “Blue Planet” Clean Water is Getting Harder to Obtain

It is a well-known fact that all life needs water. Though most animals aren't very fussy about how clean their water is, human beings have no choice but to be choosy. For those who live in the underdeveloped world, water cleanliness can mean the difference between life and death.

In the undeveloped world, the average amount of time per day spent by women looking for water that's safe for their kids is 4 hours.

And if it didn't turn out to be the right stuff, they spend the next day or two burying their babies.

That shouldn't be their choices. They shouldn't have to go that far. They shouldn't have to make the choice between drinking the kind of stuff you wouldn't give to your dog, or not having anything at all

It shouldn't be this way-Dean Camen

Questionable Priorities

You would think that upon learning this, some of the best-known philanthropists would feel compelled to help people living under such conditions have access to clean, drinkable water. Unfortunately this isn't the case, instead of clean water, dirty vaccines is what is being given to the underdeveloped world.

It has been a much bigger priority of the Bill and Melinda Gates Foundation to "help" India by giving them vaccines. In India, over \$10 billion dollars has been spent vaccinating the population against polio; unsurprisingly, this has caused over 50,000 cases of vaccine-induced paralysis.

There are many diseases that can be transmitted by water, and not all of them are caused by pathogens. Many are from pollution. It is estimated that groundwater in as much as 1/3 of India's 600 districts is not fit for human consumption. The most common pollutants are high concentrations of fluoride, iron, salinity and arsenic. Approximately 65 million people in India have been suffering from fluorosis, severe fluoride poisoning. Roughly 5 million Indians are suffering from arsenicosis, arsenic poisoning. Unfortunately the problem seems to be getting worse.

The World Health Organization reported that of the 10 million annual deaths in India, nearly 8 million are due to lack of basic health care amenities like effective sewage systems, a safe drinking water supply, elementary sanitary facilities, and hygienic conditions.

If these basic human needs continue to go unmet, the Pacific Institute estimates that waterborne illnesses could begin claiming over 100 million lives a year by 2020.

Challenges of Bringing Water to the 3rd World

Modern water infrastructure is incredibly expensive to build and maintain. It is unrealistic to expect the 3rd world to solve their water problems the same way the Western world has; they simply do not have the resources. Another solution is needed.

Contaminated water can be purified through filtration or distillation. Unless you know exactly what's wrong with the water, filtering out all of the contaminants out isn't feasible. Until recently, the distillation process always required a tremendous amount of energy.

Vapor Compression Distiller

Dean Camen's company, DEKA Research and Development, has found the solution. They designed a new portable system for water distillation, and they call it the SlingShot.

The SlingShot boils water, condenses it, and then recycles the energy used in the process. By recycling the energy, the amount of power needed to power the machine is greatly reduced—from 25,000 watts, to less power than a handheld hair dryer. Anyone can distill water with this machine as long as they have access to some electricity, some of the time.

Despite how underdeveloped the 3rd world is, most of the planet's inhabitants have at least limited access to electricity.

DEKA Research and Development has reached out to numerous governmental organizations, and they were disappointed to learn that the United Nations, The U.S. government, and other governments had no interest in helping people get access to clean water.

Dean Camen is leading the charge, stepping in to help where the Gates Foundation, the World Health Organization, the United Nations, the U.S. and other organizations have refused to help.

Everybody asks me, "Well, why do we call the box SlingShot?"

...I heard the story of David and Goliath. To me the moral of that story was: Technology is cool. And people say to me, "How, how did you get that moral out of it?"

I said well, "There was this really little guy David and he had this really big problem Goliath. But he had this little thing called the slingshot and that little piece of technology took out that really big problem.

Let's put water machines all over the world. There's no easier way to wipe out 50% of all human disease. Let's Just do it. Simple.

...We want to be helping get water to everybody on this planet. It's the right thing to do. It's simply the right thing to do. We can do it. Therefore we should do it. So why is it prevention to give people clean water? Call me crazy. We have a Department of Defense and we build the ultimate weapons of mass destruction. But how about if we build weapons of mass construction? And what if we go around the world and give everybody clean water, and it says "US" on it, your friend? Maybe we'll have a Department of Peace. And maybe we will prevent the wars. And if we can get these water machines into high volume production, I think we put them around the world and there's a way better shot that a large part of two billion people will be our friends.

To learn more, be sure to watch SlingShot, also available on Netflix and YouTube.

Recommended Reading:

- Slingshot
- *What's the Best Water for Detoxifying and For Drinking?*
- *Symptoms of Dehydration & Benefits of Proper Hydration – Are you Getting Enough Water?*

Sources:

- Slingshot
- *World Day Water Report – World Health Organization*
- *Dirty Water: Estimated Deaths from Water-Related Diseases 2000-2020 – Pacific Institute*
- *Poor water quality, a serious threat –Decan Herald*