In 2006, the *British Medical Journal (BMJ)* asked over 11,000 of its subscribers to vote on the world’s greatest medical breakthrough since its inception issue in 1840. Imagine the successes in the field of health and safety over the last century and a half. The list is a pretty amazing inventory of accomplishments for the preservation of humanity.

These important accomplishments made the short list:

**Antibiotics:** An amazing discovery and something that, like the others, is often taken for granted. Alexander Fleming discovered penicillin in 1928. He received a Nobel Prize in 1945 for the discovery.

**Anesthesia:** In 1846, a dentist in the USA used ether during oral surgery. Anesthesia has become a must in everyday operations.

**Computers:** In the early 60’s computers were first use for medical record keeping, processing insurance claims, and verifying medication compatibility to name a few.

**DNA structure:** In 1953, scientists in England discovered the structure of the DNA helix, opening the door for genetic research and understanding. They received a Nobel Prize in 1962.

**Germ theory:** Of course, Louis Pasteur, in the 1800s, began to prove theories that germs and micro-organisms (bugs) exposure caused several specific diseases.

**Imaging:** In 1895, the X-ray was discovered. That was the beginning of amazing advancements in the field such as CT scans, MRI’s and ultrasounds.

**Immunology:** Around 1796, Edward Jenner discovered a way to immunize smallpox. This led to many more discoveries in the field including allergies.

**Oral rehydration therapy:** Although it sounds simple, in 1964 it was discovered that fluids lost from diarrhea and vomit could be replaced by simply drinking fluids.

**The pill:** The pill came about in the U.S in 1960 and has been proven 99 percent effective as a contraceptive when used correctly.

**Risks of smoking:** The BMJ printed the first report connecting lung cancer to smoking to cigarettes in 1950.

**Sanitation:** In the 1800’s, the science of plumbing began to take shape. The delivery of clean water and removal of sanitary waste was linked to improved health, less disease, and a life expectancy.

**Vaccines:** In 1796 the first Vaccines began preventing smallpox which led to more inventive discoveries that assisted in eliminating polio and the measles.

As you can see, several Nobel Prizes were awarded, a who’s who of scientists was involved and millions of
Indoor Plumbing was Voted as the Most Important Medical Breakthrough in the Scientific and Medical Industry over the last 150 years...

lives were affected positively by these astonishing discoveries. Well which one was awarded the best of the best?

In January of 2007, the BMJ poll chose the “sanitary revolution” as the most important achievement in over 150 years of scientific and medical history. That’s right! The plumbing systems that are taken for granted every day in our daily lives are considered more important and critical for the health and safety of humanity than all the accomplishments of the medical establishment. Amazing! The most significant accomplishment in medical history yet billions of people still die every year because they do not receive the benefit of the most basic need.

This should make the world stand up and take notice. The citizens of the United States can drink from almost any tap with out worries. Contamination of the water supply is almost nonexistent within our plumbing systems yet we drink from bottled water because it does not taste the way we expect it to or we are concerned about certain minerals contained in the tap. Each one of us uses about 150 to 160 gallons of water each day. Just think, in the same time it takes us to use that water in one day, almost five thousand people around the world die from causes due to the inability to access safe drinking water and remove sanitation. It is estimated that approximately 3.1 million people die from preventable disease related to water and sanitation. Most of them are children.

It is interesting to think that the Oxfam, a group of closely working nonprofit associations that is attempting to eliminate poverty, hunger and disease believes it would cost an extra forty seven billion dollars, or so, to hit the target set by United Nations and the World Health Organization (Meeting the MDG Drinking Water and Sanitation Target). Sounds like a lot unless you consider what we spend our money on. One trillion dollars is spent annually globally on military efforts. The global community is estimated to spend about forty billion on pet food.

Although many organizations, movie stars and politicians are beginning to get involved in this important cause, solving this crisis is way out in the future. We as a plumbing industry will need to be involved one way or another. Indoor plumbing is not a simple task done by unskilled labor. It takes training and an understanding of health and safety aspects to get it right. Every country, developing or developed, is different. If the world really wants to make a difference, engage an army of plumbers. We have done it before and can do it again!

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In the meantime, use your communication skills to promote the urgency of this cause to raise awareness. It sounds so simple but once people hear the statistics and of the inability for people to receive the most basic of needs they become interested. It belongs at the top of the world’s priority list. Just make people think when they drink!

ABOUT CODES AND STANDARDS INTERNATIONAL

Codes and Standards International (CSI), is a leading global consultancy assisting manufacturers to test, certify and list products while simultaneously implementing successful strategies for codes and standards acceptance and industry recognition. CSI advocates client interests around the world at code and technical standard meetings and product review and regulatory hearings for organizations such as IAPMO, ICC, ANSI, UL, NSF, ETI, LEED, ASHRAE, NFPA, CSA and more. More than 30 years of experience and a decade dedicated as senior staff for the world’s leading construction safety code and standards authorities (ICC and IAPMO). The consultancy’s diverse client folio includes Fortune 500 companies, small family owned manufacturers and not for profit associations.

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