

Waterborne Diseases in Africa

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By Mauria Crayton

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Waterborne diseases are diseases that you get from the ingestion of infected water. This water can be infected with microorganisms, feces, sewage and chemicals. Africa is one of the highest rated continents for waterborne diseases. Many people are dying from these waterborne diseases. Can these waterborne diseases be fixed or prevented? What can be done to fix this problem? Why are there so many waterborne diseases in Africa? Can Africa be taught to practice good hygiene?

“There is about 20% of the world’s population without clean drinking water. Every twenty seconds, a child in Africa dies from unclean drinking water. That’s forty-five hundred children a day and 350 million and families (45% of total population) who do not have clean drinking water” (“Water for Africa,” 2011). Just from the rate of children’s deaths alone, almost half of the population is decreasing. That is very tragic and unfortunate for Africa. This is why Africa needs cleaner and safer conditions for their water. Contamination is spread by rain, river, lakes, creeks, public water systems and other bodies of water. Waterborne diseases can also be spread by animals and people and by the handling of water and food without proper hand-washing.

“There are about 3.4 million people worldwide who die every year from waterborne diseases” (Berman, 2005). Africa has a massive population, and so many people are dying are dying in poverty, which makes it very difficult to have food and afford to do something to have clean drinking water. When they ingest infected water and become ill, they have no money or no way to get to a doctor. Another problem may be that some people are dying from these diseases because they are not aware of how to maintain the cleanliness of their water.

There are many waterborne diseases that roam the land of Africa. Most of the diseases cause diarrhea, malnutrition, organ damage and skin infections. Pneumonia and diarrheal diseases are the two biggest causes of death for children under the age of five years old. These diseases are *Dracunculus medinensis*, Schistoma, Salmonella, Shigella, Cholera, E. coli and Rotavirus. *Dracunculus medinensis* is Guinea worm disease that is transmitted through drinking water. People are infected with this worm by drinking water infected with water fleas that carry these worm larvae. Schistoma is a snail fever disease; the snail's natural host is the buffalo. The worm burrows through the skin of the farmers' wives and children. The worms then burrow into nails where they multiply and change into an infectious form. Salmonella is in the intestinal tract of humans and animals. It is excreted by humans, pets, wild life and farm animals through feces. Sewage and agricultural pollution are the main sources of pathogens in natural waters. Shigella is bacteria transmitted by the faecal-oral route from person-to-person contact through food and water. Cholera is a bacterial disease of the small intestine, which can be fatal. E. coli is bacteria found in the intestine and passed through feces, and it usually causes no harm. Rotavirus is the most single cause of death in infants. It is also the major cause of diarrhea and vomiting and causes severe dehydration (Αγγελικη, 2011).

Waterborne diseases are serious and life threatening and also dangerously deadly. The bulk of the diseases affect the children more than adults because children's immune systems are not strong enough to fight off diseases. These diseases affect the major organs of the body; this is why the body shuts down after long-term exposure to waterborne diseases. These diseases affect the nervous system, kidneys, liver and spinal cord. Once these organs have shut down, the body can not survive without them. Africa needs proper sanitation and clean water.

The people need clean water for drinking, washing and bathing. These people need shelters and homes. They sleep outside with mosquitoes, flies and snails, the same organisms that carry water diseases. They need systems to remove contaminants and purify water. Waterborne diseases can be reduced by clean water. This water has to be disinfected and purified. If the people get clean water along with medical care, the numbers of diseases will be lowered.

There are a number of solutions to help with this problem. One would be water wells. Water wells are dug deep into the ground. Water wells supply fresh, clean, safer water. They are also low maintenance and steadily flowing. The well comes with a purifier that sits on the ground, outside of the well. The purifier will purify all of the water that comes from the well. This is a good source for better water (<http://www.thewaterproject.org/clean-water-wells-in-africa.asp>).

Another method for providing clean water is distillation. Distillation is the boiling of the infected water until it reaches a high enough temperature to kill all the pathogens. Distillation can be done in the homes. Thus method is the fast and easy. Well and boiling are just two of many ways to help with the water problems in Africa (“Waterborne Diseases,”).

Africa has come a long way with their water and has a lot farther to go. The world has technology and a lot of determined, hard-working people to turn this dream of clean water into a reality. People in Africa are dying from these diseases, dying in large numbers, which is causing a major decrease in the population. This place needs hope, attention, work and a drastic change, especially in the number of wells and other purifying systems.

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