Introduction

Neglected tropical diseases (NTDs) are a group of bacterial and parasitic diseases that infect one in six people around the world. Inadequate water supply, limited access to sanitation facilities and poor hygiene are major contributing factors to the spread of NTDs and many other diseases.

The magnitude of these problems is significant. More than half a billion people around the world lack access to clean water, while more than two billion people do not have access to a proper toilet. Many common, poor hygiene practices, such as open defecation and failure to wash one’s hands, promote the spread of disease.

How WASH Impacts NTD Control

Improvements to water, sanitation and hygiene (WASH) can help control and protect people from many of the most common NTDs.

WATER

Clean water is a major part of disease prevention. NTDs can be spread by drinking contaminated water and eating food that was not properly washed.

Areas with stagnant water are breeding grounds for insects that carry NTDs, notably mosquitoes, which transmit lymphatic filariasis. In many communities, key water sources, such as lakes, also harbor the parasite that causes schistosomiasis (snail fever).
HYGIENE

Access to clean water and good hygiene practices is critical to preventing NTDs from spreading within a community. This is especially important for trachoma, the leading cause of preventable blindness.

Trachoma is primarily spread when the eye discharge from an infected person is shared through contact with his or her hands, clothing or other personal effects, as well as through transmission by eye-seeking flies.

SANITATION

Schistosomiasis and intestinal worm infections—such as ascariasis (roundworm), trichuriasis (whipworm) and hookworm—are easily spread in communities that do not have access to toilets or sanitation facilities. Schistosomiasis spreads when infected people urinate or defecate close to a water source, contaminating it with the larvae of the parasite.

Intestinal worm infections can spread when people accidentally ingest contaminated food or water. Simply walking barefoot in areas endemic for hookworm leaves people exposed to the disease. As a result, people can be continually re-infected as they work, play, bathe or eat. Children especially have a high risk of contracting these diseases because they often play barefoot outside and put their hands in their mouths without washing them.

Combining Efforts

Measuring the decline in disease is an important way to document the success of WASH improvements. According to the World Health Organization, improving WASH can reduce trachoma by 27 percent, and improved sanitation could reduce schistosomiasis by as much as 77 percent.

Evidence suggests that while NTD treatment and hygiene education reduced intestinal worm infections when implemented individually, the rate of reduction in infection is significantly better when these two methods for disease control are combined.

Taking a comprehensive approach to WASH initiatives by integrating an NTD control component will ensure continued improvements in global health and development.

More Information

For more information, please visit www.globalnetwork.org.