

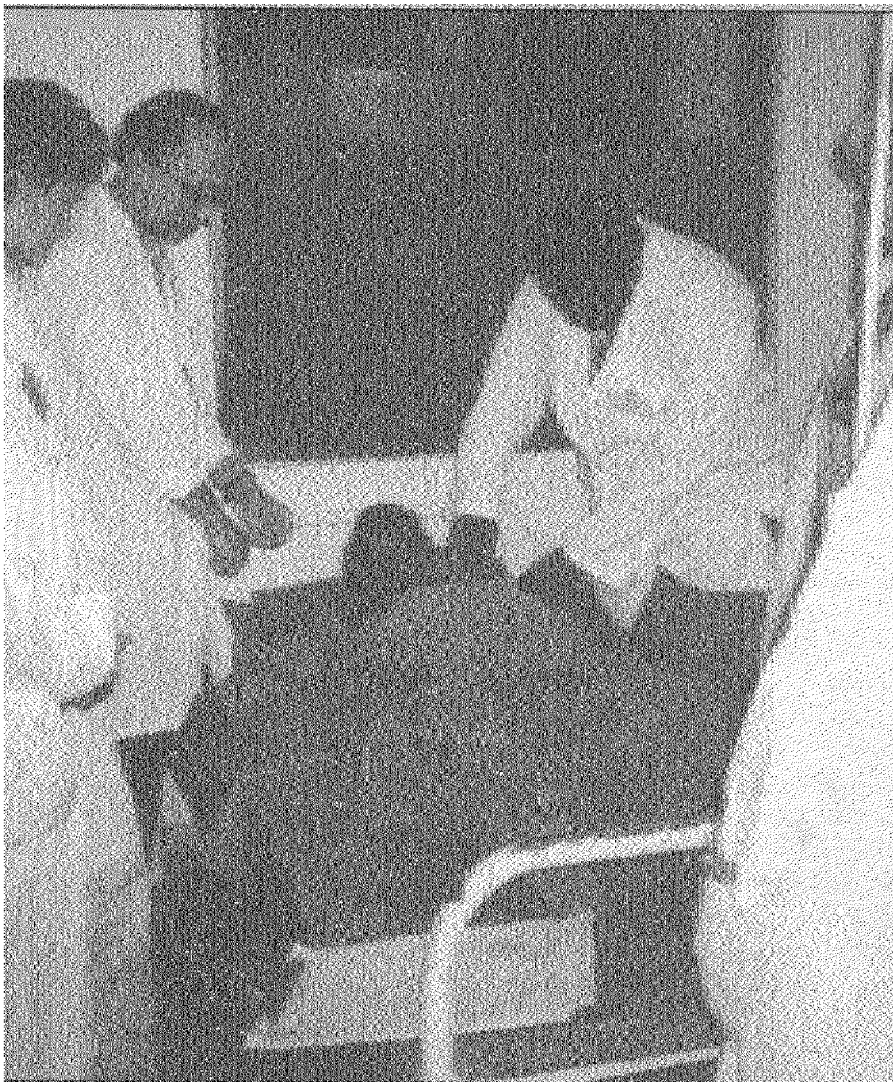
Training to Combat Outbreaks of Diarrheal Diseases During Emergencies

Since 1991, an estimated 59 million people have been exposed to diarrheal diseases as a result of droughts, floods, hurricanes and civil conflicts. Cholera and shigella are the diarrheal outbreaks that can increase morbidity and mortality in disaster situations. The disruption of water and sanitation systems and public health facilities during a humanitarian emergency aggravates endemic cholera and shigella, often requiring those victims seriously infected to receive immediate treatment. USAID/OFDA is strengthening the capacity of NGOs to manage cholera and shigella outbreaks during emergencies by continuing to fund the International Center for Diarrheal Disease Research, Bangladesh (ICDDR,B) in Dhaka.

Cholera is an acute, diarrheal illness caused by infection of the intestine with the bacterium *Vibrio cholerae*. People usually become infected by drinking water or eating food contaminated by the bacterium. The infection is often mild or without symptoms, but approximately one in 20 infected people has a severe case, characterized by profuse watery diarrhea, vomiting, and leg cramps. A victim's rapid loss of body fluids leads to dehydration and shock. Without treatment, death can occur rapidly, sometimes within hours. Shigella is another bacterial disease that can cause sudden and severe bloody diarrhea. Shigella is commonly spread through contaminated food and by person-to-person contact and is endemic in both tropical and temperate climates.

Cholera is an endemic problem in many developing countries where sanitation and hygiene are often inadequate. WHO reports that Africa accounts for more than half of the worldwide cases of cholera and also experiences the highest average case fatality rate (nearly 5% in 1998) compared with the rest of the world.

The conditions in which cholera thrives—humid areas with stagnant pools of polluted water, overcrowding, contaminated water supplies, and poor hygiene and sanitation—are precisely those that are often found in the aftermath of disasters. According to WHO, the increase in cholera cases in Latin America from 17,760 in 1997 to 57,106 in 1998 was directly related to the continuing effects of major disasters caused by the 1997-1998 El Niño and by Hurricane Mitch in 1998. In drought or civil conflict, cholera can be rapidly transmitted along roads and rivers where



Participants in a USAID/OFDA-funded training program in Bangladesh gain first-hand experience in treating diseases like cholera and shigella (photo by Julianne Vaillancourt, USAID/OFDA).