

The proposed agreement is subject to regulatory reviews.

WHO Announces Global Plan for Cholera Control

An epidemic of cholera is sweeping through parts of Latin America, especially among the urban and rural poor. Between 90 million and 120 million people are at risk.

Until January 1991, this disease was virtually unknown in the Americas, with only a few imported cases reported in the United States. This year alone, the New Jersey State Health Department has reported eight confirmed cases in that state that were linked to crab meat brought into the United States from Ecuador. Another confirmed case in Georgia was linked to an American physician who attended a conference in Lima, Peru. The Centers for Disease Control is investigating other cases in Miami, where two individuals were hospitalized with cholera symptoms after visiting Ecuador and Peru, respectively.

Given the situation created by the cholera epidemic in Latin America, in certain African countries, and, as a result of the Gulf War, in the Mideastern Persian Gulf region, Hiroshi Nakajima, MD, Director-General of the World Health Organization (WHO), has formed a global cholera control task force in Geneva, Switzerland, to coordinate WHO's global action regarding cholera control.

The task force will be made up of experts from WHO in disease surveillance, case management, water and sanitation, food safety, emergency intervention, and information and education.

"Today an emergency situation exists," said Dr. Nakajima. "We have seen the rapid eruption of cholera within a very short period of time. The death toll from this preventable and treatable scourge—especially among children—is a tragedy unfolding before our eyes. Unfortunately, continued spread of the disease appears inevitable in areas lacking the needed social and sanitary infrastructure. Our challenge is to prevent deaths in the short-run while supporting development in the long-run. The new task force will be addressing these challenges."

As of mid-April 1991, WHO had received reports of over 177,000 new cases of cholera in 12 countries. Five of these countries—Brazil, Chile, Columbia, Ecuador, and Peru—account for 78% of the total number of cases and over 1,200 deaths. This is the first time in this century that cholera has been reported from Latin America, although outbreaks were known to have occurred previously. The number of new cases of cholera for the first four months of

1991 nearly equaled the worldwide number of cases—178,111 during all of 1971—when a previous cholera pandemic was at its peak in Africa and Asia.

Although WHO is moving to attack this latest outbreak of cholera, it cannot meet the challenge alone. Thus, Dr. Nakajima is appealing to the international community to provide urgent support for cholera control, including the rehabilitation and reconstruction of the social infrastructure, especially in Peru and other countries at high risk. WHO is in the process of preparing a coordinated global plan of action. The cost of implementing this plan is being estimated.

"In Peru alone, it will cost almost \$60 million (US) during the next year to meet the most immediate demands of rehabilitation and reconstruction," Dr. Nakajima said. "If the epidemic continues to spread, as we expect it will, the overall cost of combating it will dwarf that figure. Preventive action now will reduce these costs: action that we are now promoting as part of a worldwide war on cholera."

WHO experts estimate that ensuring safe water supplies and sanitation in Latin America could require a total capital investment of approximately \$5 billion (US) a year over the next ten years. In addition, WHO estimates that the recent outbreak of cholera could cost the impoverished economy of Peru up to \$1 billion (US) in 1991 in reduced economic activity, losses in the fishing, agricultural, and tourism sectors, unemployment, reduction of exports, and general health system costs.

The link between outbreaks of cholera and the breakdown of sanitation, water supply, and safe food systems clearly is apparent in the current outbreak afflicting Latin America. People living in urban slums in some countries are at greatest risk, not only because they lack adequate water supply and sanitation, but because they are poorly educated, live in crowded conditions, have little access to medical and health services, and are poorly nourished. In rural and mountainous areas, lack of safe water and sanitation as well as low levels of education and access to medical health services can create a higher level of risk.

It is for these reasons that the WHO task force will develop strategies and plans based on a broad approach that calls on a range of activities and capabilities of WHO. These will involve intensified disease surveillance, a coordinated program for improved case management, rapid intervention to improve access to safe water and sanitation, and information and education programs. In addition, WHO intends to mount a global information and education campaign to ensure that correct, potentially life-saving information about cholera is disseminated to the public.

Indigenous cholera cases were reported in 1990 from Algeria, Angola, Burundi, Cameroon, Ghana, Malawi, Morocco, Mozambique, Sao Tome and Principe, the United Republic of Tanzania, Zambia, China, the Federated States of Micronesia, India, Indonesia, Iran, Jordan, Macao, Malaysia, Nepal, Singapore, Tuvalu, Vietnam, and Romania, with a local outbreak in Russia. Imported cases were reported in 1990 in Austria, Denmark, France, Germany, the Netherlands, Spain, Great Britain, Northern Ireland, the United States, Australia, Hong Kong, Japan, New Zealand, and Oceania. In 1991, Brazil, Chile, Colombia, Ecuador, Peru, Benin, and Zambia have reported cholera. Also, in 1991, Iran, Spain, and the United States have identified imported cases.

Most cholera cases can be treated adequately by administering a solution of oral rehydration salts. During an epidemic outbreak, 80% to 90% of patients generally can be treated by oral rehydration alone. The few patients who become severely dehydrated

need to be given intravenous fluids. In severe cases, the administration of antibiotics can reduce the volume and duration of the diarrhea and the period of *Vibrio* excretion. Tetracycline is the antibiotic of choice in most cases.

"Improvement of water supplies and sanitation is the ultimate solution to the problem, and action to this end must (begin) immediately," Dr. Nakajima said. "What must be faced, however, is the reality of increasing poverty and widespread underdevelopment around the world. Today, we live in a world where the gap between rich and poor, north and south is painfully apparent, and even more sharply illustrated by this current outbreak. We know how to control cholera, but the disease can easily get out of control when economic, social, and health infrastructures fail. Cholera is but one dramatic symptom of the failure of development. In combating cholera, and many other health problems as well, we are combating underdevelopment as well as striving for better health."