

# Water-related Diseases

## Cholera

Cholera outbreaks can occur sporadically in any part of the world where water supplies, sanitation, food safety and hygiene practices are inadequate. Overcrowded communities with poor sanitation and unsafe drinking-water supplies are most frequently affected.

### **The disease and how it affects people**

Cholera is an acute infection of the intestine, which begins suddenly with painless watery diarrhoea, nausea and vomiting. Most people who become infected have very mild diarrhoea or symptom-free infection. Malnourished people in particular experience more severe symptoms. Severe cholera cases present with profuse diarrhoea and vomiting. Severe, untreated cholera can lead to rapid dehydration and death. If untreated, 50% of people with severe cholera will die, but prompt and adequate treatment reduces this to less than 1% of cases.

### **The cause**

Cholera is caused by the bacterium *Vibrio cholerae*. People become infected after eating food or drinking water that has been contaminated by the faeces of infected persons. Raw or undercooked seafood may be a source of infection in areas where cholera is prevalent and sanitation is poor. Vegetables and fruit that have been washed with water contaminated by sewage may also transmit the infection if *V. cholerae* is present.

### **Distribution**

Cholera cases and deaths were officially reported to WHO, in the year 2000, from 27 countries in Africa, 9 countries in Latin America, 13 countries in Asia, 2 countries in Europe, and 4 countries in Oceania.

### **Scope of the Problem**

Control of cholera is a major problem in several Asian countries as well as in Africa. In the year 2000, some 140 000 cases resulting in approximately 5000 deaths were officially notified to WHO. Africa accounted for 87% of these cases. After almost a century of no reported cases of the disease, cholera reached Latin America in 1991; however, the number of cases reported has been steadily declining since 1995.

## **Interventions**

To prevent the spread of cholera, the following four interventions are essential:

- Provision of adequate safe drinking-water
- Proper personal hygiene
- Proper food hygiene
- Hygienic disposal of human excreta.

Treatment of cholera consists mainly in replacement of lost fluids and salts. The use of oral rehydration salts (ORS) is the quickest and most efficient way of doing this. Most people recover in 3 to 6 days. If the infected person becomes severely dehydrated, intravenous fluids can be given. Antibiotics are not necessary to successfully treat a cholera patient.