



## Emerging and Reemerging Infectious Diseases, Region of the Americas

Vol. 2, No. 4—29 January 2004

### **Cholera Outbreak in Zamora Chinchipie Province, Ecuador**

The presence of a cholera outbreak affecting a total of 25 persons was reported on 21 December 2003 in Zamora Chinchipie province, Yantzaza canton, Chicaña parish, San Vicente de Caney district. Information submitted on 22 January 2004 indicates that the outbreak is now under control. All cases detected on 21 and 22 December 2003 originated in the aforementioned area.

On 25 December 2003, the National Institute of Hygiene (*Instituto Nacional de Higiene / INH*) confirmed the presence of *Vibrio cholerae* serotype 01, biotype El Tor, serotype Inaba in five (5) samples taken in swabs from the affected persons. In order to carry out toxigenicity tests, the samples were sent to the Dr. Carlos Malbrán National Institute for Infectious Diseases (*Instituto Nacional de Enfermedades Infecciosas "Dr. Carlos Malbrán"*) in Argentina, a regional reference center.

The age group most affected consisted of those between 15 and 44 years of age and those 45 years and over, which represents 92% of the total number of cases; most of them (64%) were males. The fatality rate was 4% (with 1 death). Those affected shared the fact that they had attended the wake of the first suspected case and partook of food at that event.

The immediate response at the local level allowed for the outbreak to be adequately controlled. Prevention and control measures included, among others, chemoprophylaxis for high-risk persons, intra- and peridomestic disinfection in patient households, bleach distribution, and community education on hygiene measures, through the distribution of educational material and prevention spots via mass media. In addition, an investigation is underway to determine the spread of *Vibrio cholerae* among the inhabitants of San Vicente, in order to detect healthy carriers as well as rivers and streams adjacent to the affected population.

In 2003, the rate of acute diarrhea diseases was 423.5 per 10,000 inhabitants, higher than that of 2002 (of 371.0 per 10,000 inhabitants). In Zamora province, with the cholera outbreak at the end of December 2003, the incidence rate for cholera amounted to 3.18 per 10,000 inhabitants.

Source: Dirección de Salud de Zamora Chinchipe, *Informe final sobre brote de cólera en la provincia de Zamora, Ecuador, enero de 2003* (Zamora Chinchipe Health Department, *Final Report on the Cholera Outbreak in Zamora Province, Ecuador, January 2003*, in Spanish).