

HIGHLIGHT



BOLIVIA: LEADER IN BATTLE AGAINST FASCIOLIASIS

Wayra can hardly remember how many times he missed school because of abdominal pain. One day, health department personnel came to his school in Tiahuanacu. “They talked to us about fascioliasis, and I took a tablet that they gave to me and all my schoolmates. Since then, they have been coming every year, and it doesn’t hurt any more. Also, I know now that I have to wash the watercress well before eating it.”

Certain portions of the northern *altiplano* of Bolivia have the highest rates of fascioliasis infection in the world, according to research led by, among others, the National Institute of Health Laboratories of Bolivia (*Instituto Nacional de Laboratorios de Salud*, INLASA); the University of Valencia (Spain) (the WHO Collaborating Centre on Fascioliasis and Its Snail Vectors); the University of Dublin (Ireland); and the University of Perpignan (France).

“The area in which the disease circulates extends from the city of La Paz to the areas around Lake Titicaca, at altitudes of 3,820–4,100 m—this information is consistent with the finding of cases in humans and animals,” explained one of the principal partners in fascioliasis control in Bolivia at the University of San Andrés. The endemic area is essentially rural, made up of small, mostly indigenous villages and communities, where altitude and temperature facilitate reproduction of the snails and infection of the animals involved in the Chain of transmission.

The Departmental Health Service of La Paz (*Servicios Departamentales de Salud*, SEDES) emphasizes that “fascioliasis is a health problem affecting populations that live in conditions of high social vulnerability, with limited access to health services,” whose “epidemiologic, socioeconomic, cultural, and environmental conditions are unfavourable.”

Mass distribution of fascioliasis medication prevents much of the pain that the disease would cause to the community.



Since 2008, with support from PAHO/WHO and various partners, the Bolivian government has conducted mass annual deworming campaigns with triclabendazole. The results published in the most recent official report, in August 2012, indicate that the campaign benefited 64% of the population in 12 municipalities in the department of La Paz, through the administration of 296 234 antiparasite tablets donated through WHO. The deworming was carried out in a number of phases: first in schools, and then in concentrated groups, with the third and last

phase consisting of house-to-house visits, with help from the local authorities.

SEDES has been a key element throughout this process, reducing the incidence of the disease and the symptoms produced by the infection, educating the population, providing timely diagnostic services, offering medicines for treating isolated cases, and training laboratory technicians and doctors. SEDES expressed satisfaction that "human, material, and financial efforts have not been wasted," and applauded the "significant" reduction of fascioliasis in the northern



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altiplano, where the prevalence of fascioliasis dropped from 17% in 1997 to 2% in 2013. It also reports that the treatment coverage is “good and must continue to prevent the transmission of fascioliasis,” but emphasizes that there must be continuing efforts to involve the communities, to help ensure the interventions are successful.

One important consideration is the fact that the population in the endemic area is migratory, and ranges over a vast territory, making it difficult to provide treatment and determine how many people are affected.

Along with deworming, ongoing education is vital to create awareness about practices that are essential for minimizing infection, such as not using manure as a fertilizer for aquatic plants, periodically deworming livestock, and isolating the cultivation of watercress and other aquatic plants from waters contaminated by feces.

The Bolivian experience is considered an outstanding example of best practices for developing regional and global programs to combat fascioliasis. Bolivia has developed a model and is making it available to others for action in other affected areas.