

Knowledge, attitudes, and practices regarding hantavirus disease and acceptance of a vaccine trial in rural communities of southern Chile.

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Abstract

Andes hantavirus cardiopulmonary syndrome, transmitted by *Oligoryzomys longicaudatus*, has no approved treatment, a case fatality rate of 35%, and documented person-to-person transmission. An Andes vaccine, highly needed for prevention, is in development. We aimed to evaluate knowledge, attitudes and practices (KAP) regarding hantavirus disease and willingness to participate in a future Andes vaccine trials through a cross sectional face-to-face oral survey of a randomly selected adult sample from 2 rural communes in southern Chile. Human subjects approval was obtained from our institutional IRBs, and participants signed informed consent. We enrolled 319 subjects from Corral and 321 from Curarrehue; 98% had heard about hantavirus disease and its reservoir but only half knew about transmission, symptoms and prevention. Participants fear the disease but are only partially aware of their own risk. One third of participants reported presence of rodents inside their homes. Despite moderate confidence in their health system, most subjects perceived vaccines as beneficial, and 93% would accept an approved hantavirus vaccine. Half would agree to participate in a vaccine trial and 29% would allow their children to participate. Motivations to participate were mainly altruistic, while risk perception was the main reason for declining. Knowledge about hantavirus disease and prevention practices require reinforcement, and a vaccine trial seems feasible in these populations.