



Contribution ID: 440

Type: **Poster presentation**

Evaluation of the exposure risk to Andes hantavirus through domestic animal ownership at the human-wildlife interface in Andean Patagonia

Monday, October 5, 2026 7:31 PM (1 minute)

In the northern Patagonian region of Argentina and Chile (33°-46° S), Andes orthohantavirus (ANDV) is a major public health concern due to its unique person-to-person transmission and high case fatality rates (30-50%). The expansion of human settlements into forested areas increases infection risk through greater exposure to native rodent reservoirs. In this context, domestic animals may influence the transmission dynamics of zoonotic agents such as ANDV. We collected blood samples from dogs (n=67) and cats (n=146), and assessed ownership patterns (including confinement status and outdoor access) and animal behavior through structured surveys with pet owners during municipal neutering campaigns in different Argentine localities. Preliminary results show that 13 % of pets are strictly confined, whereas 87 % are semi-free; no fully free-ranging animals were recorded. Rodent-hunting behavior was reported in 74% (18% dogs, 56% cats) of domestic animals. Additionally, 82% of respondents frequently observed free-roaming animals, and 86% considered this a public health risk. Unrestricted outdoor access, rodent hunting behavior, and weak responsible ownership practices (e.g., low vaccination compliance) highlight potential contacts between domestic animals and wild ANDV reservoirs. In a region with a high-risk of human hantavirus infection, these findings underscore the need to strengthen responsible pet ownership and promote health education strategies within a One Health framework.

Keywords

Andes virus; hantavirus; Argentina; domestic animals; pet ownership; One Health

Registration ID

OHS26-114

Professional Status of the Speaker

PhD Student

Junior Scientist Status

Yes, I am a Junior Scientist.

Author: SZMELC, Andrea

Co-authors: Dr JUAN, Ernesto (Departamento de Conservación y Educación Ambiental Parque Nacional Lago Puelo- Administración de Parques Nacionales-Argentina); Mr DOBLY, Alexandre (Sciensano, 14 J. Wytsman street, 1050 Brussels, Belgium); Dr OJEDA, Valeria Susana (Grupo de Biología y Ecología de Animales Patagónicos, IN-IBIOMA, Universidad Nacional del Comahue-CONICET, 8400 Bariloche, Argentina)

Presenter: SZMELC, Andrea

Session Classification: Snacks & Poster Viewing I

