

# HANTAVIRUS INFECTION IN HUMANS AND RODENTS IN SOUTHERN ARGENTINA

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## INTRODUCTION

Andes virus, associated to *Oligoryzomys longicaudatus*, is the etiologic agent of Hantavirus Pulmonary Syndrome (HPS) in the Southern region of Argentina. HPS cases have been diagnosed, retrospectively and prospectively, from 1988 in Río Negro, Chubut and Neuquen southern provinces.

## OBJECTIVE

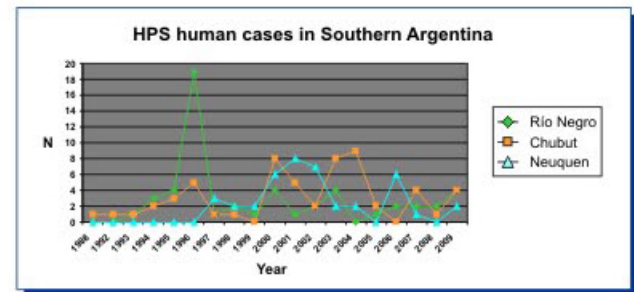
To investigate the relationship between hantavirus seroprevalence in rodents and the occurrence of HPS cases in Southern Argentina.

## MATERIAL AND METHOD

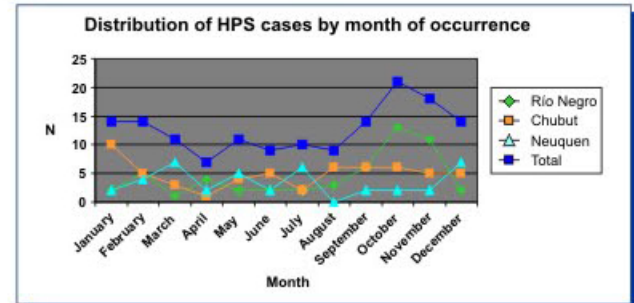
Serum samples from rodents captured in different locations of Río Negro, Chubut and Neuquen provinces from 1996 to 1998, and in Cholila area (Chubut) from 2003 to 2008, were screened for hantavirus infection by detection of IgG by ELISA. Data from HPS cases were obtained from the Ministry of Health of each province.

## RESULTS

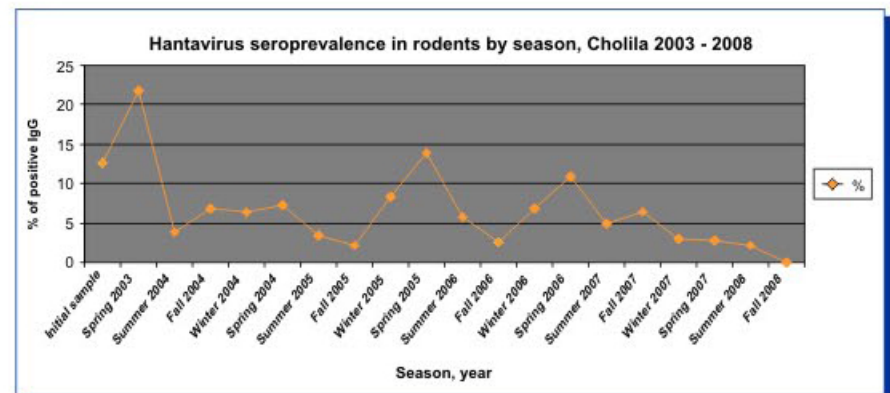
From 1988 to 2009, 152 HPS cases were confirmed in Southern provinces of Río Negro (53), Chubut (58), and Neuquén (41); the average was 8 by year.



The number of cases ranged from 7 in April to 21 in October, with occurrence of cases all over the year

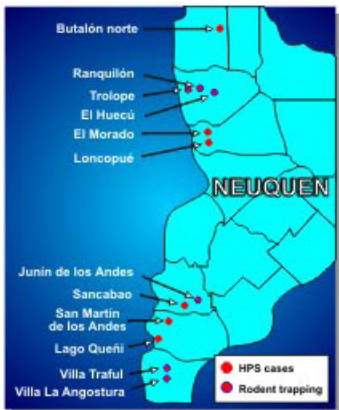


Higher seroprevalences were observed every Spring, with exception of 2007.

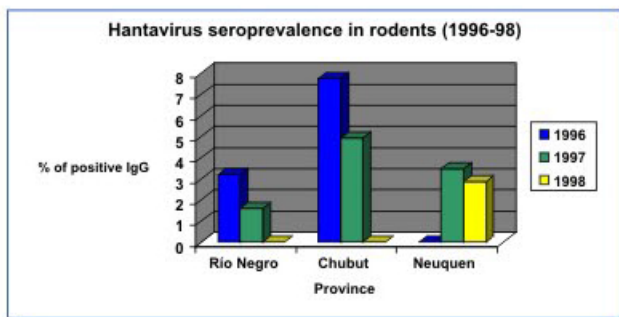


## CONCLUSION

From the initial diagnosis of HPS in Southern Argentina, the number of cases presented a large variation between provinces and along the years. The peak of incidence was in 1996, in occasion of the person-to-person transmission. The seroprevalence of hantavirus antibodies in rodents did not correlate directly with the presence of HPS cases, suggesting that other variables such as behavior habits and focality of infection among others could be important to evaluate for determining the risk for humans.



The IgG prevalences in rodents were: 3.2 % in Río Negro and 7.8 % in Chubut in 1996; 1.6 % in Río Negro, 4.9% in Chubut and 3.5% in Neuquen in 1997, and 2.9% in Neuquen in 1998.



In Cholila prevalences ranged from 14.4% in 2003 to 1.0 % in 2008, with a persistent descending tendency

