

Learn about *Hantavirus*

By: **Francisco Javier Díaz, MD, PhD**
Professor at the Faculty of Medicine,
Universidad de Antioquia



1 What are hantaviruses?

They are a group of viruses that infect wild rodents—that is, those that live in rural, jungle, or desert areas. Only under exceptional conditions can hantaviruses infect humans.

More than fifty species of hantavirus are known, and each one is specific to a different species of rodent. There are more than two thousand species of rodents, and most do not carry hantavirus; in particular, urban and domestic rodents, such as the common house mouse and sewer or roof rats, are not a significant source of hantavirus.

2 How does hantavirus infection manifest?

In humans, hantavirus infection can range from completely asymptomatic to a severe and potentially fatal disease. Some hantaviruses only produce mild infections that are indistinguishable from a cold or another trivial infection.

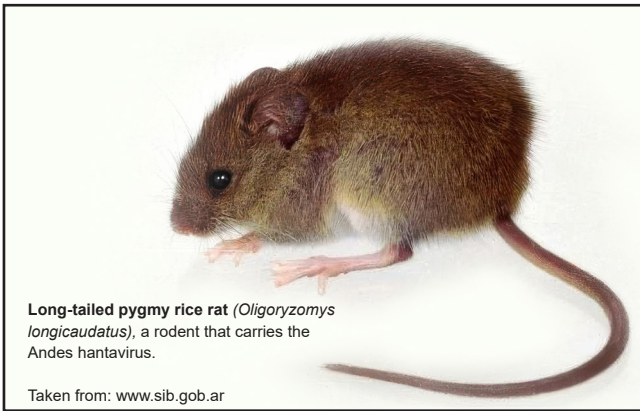
Others, conversely, such as the Andes hantavirus (or simply Andes virus), can cause

a very severe respiratory illness called "hantavirus pulmonary syndrome". This is characterized by fever, progressive difficulty breathing, and loss of blood oxygenation, which can lead to death due to acute respiratory failure.

3 Who can get hantavirus infection and how is it transmitted?

Hantavirus infection occurs when dust particles contaminated with the urine or feces of wild rodents are inhaled. More rarely, it can be acquired through a bite or by handling the rodent.

Only one of the more than fifty viruses in this group, the so-called Andes hantavirus, has been associated with person-to-person transmission. This type of contagion requires very close contact, such as what might occur in a family setting, a hospital environment, or in "closed communities" (such as passengers on a ship sailing through the South Atlantic who repeatedly shared the same spaces).



Note: Hantaviruses are not acquired through casual contact on the street or in public transportation. The Andes hantavirus is specific to the "long-tailed pygmy rice rat" (*Oligoryzomys longicaudatus*), a wild rodent from the Southern Cone of America, mainly Argentina and Chile. Only those who have been there, or those who come into very close contact with people who have visited those regions, can develop the disease.

4 What complications can hantavirus infection cause?

The most significant complication is precisely "hantavirus pulmonary syndrome." This stage of the infection lasts between four and six days and occurs in people infected by the Andes hantavirus and certain other hantaviruses. Approximately 30% of those who contract these viruses may die; the rest, once they manage to overcome this stage, recover completely and are left with no long-term sequelae.

5 When should you consult a doctor?

Whenever an illness develops with progressive

difficulty breathing, an emergency room should be consulted without delay. However, most of the time this symptom is due to other causes, such as pneumonia caused by bacteria or other viruses, or due to heart or respiratory system diseases.

6 How is hantavirus disease diagnosed?

The disease may be suspected when the previously described symptoms occur alongside a history of having visited dusty rural settings frequented by wild rodents. Confirming the diagnosis requires highly specialized laboratory tests that are not available in standard clinical laboratories or hospitals in our local environment.

7 How is hantavirus disease treated?

Hantavirus pulmonary syndrome must be treated in an Intensive Care Unit (ICU) and requires sophisticated equipment, such as mechanical ventilators or extracorporeal membrane oxygenation (ECMO) machines. These are only available in high-complexity hospitals.

8 Is it possible to prevent hantavirus infection?

There are no vaccines or medications to prevent this infection. In rural areas, breathing in dusty environments should be avoided. Very close contact with people suspected of having a hantavirus infection or other respiratory viruses should also be avoided.

Recommended Reading

It is recommended to consult the World Health Organization website, available at: <https://www.who.int/news-room/fact-sheets/detail/hantavirus>

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