

HANTAVIRUS

Hantavirus pulmonary syndrome; Hemorrhagic fever with renal syndrome

Hantavirus is a life-threatening disease spread to humans by rodents that has symptoms similar to [influenza](#). Hantaviruses are the most widely distributed zoonotic rodent-borne viruses.

Hantaviruses are [RNA viruses](#) in the *Bunyaviridae* family. Humans may be infected with hantaviruses through [rodent](#) bites, urine, saliva or contact with rodent waste products. Some hantaviruses cause potentially fatal diseases in humans, hemorrhagic fever with renal syndrome (HFRS) and hantavirus pulmonary syndrome (HPS). HPS cannot be transmitted person-to-person. The name *hantavirus* is derived from the [Hantan River](#) area in [South Korea](#), which provided the founding member of the group: Hantaan virus (HTNV), isolated in the late 1970s by [Ho-Wang Lee](#) and colleagues. HTNV is one of several hantaviruses that cause HFRS, formerly known as Korean [hemorrhagic fever](#).

Hantavirus is carried by rodents, especially deer mice. The virus is found in their urine and feces, but it does not make the animal sick.

It is believed that humans can get sick with this virus if they come in contact with contaminated dust from mice nests or droppings. You may come in contact with such dust when cleaning homes, sheds, or other enclosed areas that have been empty for a long time.

Hantavirus does not spread between humans.

I. Symptoms:

The early symptoms of hantavirus disease are similar to the flu and include:

- Chills
- Fever
- Muscle aches

People with hantavirus may begin to feel better for a very short time, but within 1-2 days, it becomes hard to breathe. The disease gets worse quickly.

Symptoms include:

- Dry cough
- General ill feeling ([malaise](#))
- Headache
- Nausea and vomiting
- Shortness of breath

Signs of Symptoms

Haemorrhagic fever with renal syndrome:

Hantavirus has an **incubation time** of two to four weeks in humans before symptoms of infection occur. The symptoms of HFRS can be split into five phases:

- **Febrile phase:** Symptoms include **fever**, chills, sweaty palms, diarrhea, **malaise**, **headaches**, **nausea**, **abdominal** and **back pain**, **respiratory** problems such as the ones common in the **influenza virus**, as well as gastro-intestinal problems. These symptoms normally occur for three to seven days and arise about two to three weeks after exposure.
- **Hypotensive phase:** This occurs when the blood platelet levels drop and symptoms can lead to **tachycardia** and **hypoxemia**. This phase can last for 2 days.
- **Oliguric phase:** This phase lasts for three to seven days and is characterised by the onset of **renal failure** and **proteinuria** occurs.
- **Diuretic phase:** This is characterized by **diuresis** of three to six litres per day, which can last for a couple of days up to weeks.
- **Convalescent phase:** This is normally when recovery occurs and symptoms begin to improve.

Formerly known as **Korean hemorrhagic fever**, HFRS is the term accepted by the **World Health Organization**.

Hantavirus (cardio-)pulmonary syndrome:

Hantavirus pulmonary syndrome (HPS) is an often fatal disease caused by hantavirus infection. The symptoms are very similar to those of HFRS and include **tachycardia** and **tachypnea**. Additionally, patients will develop difficulty breathing, cough and shortness of breath. Such conditions can lead to a cardiopulmonary phase, where **cardiovascular shock** can occur. Rodent control in and around the home remains the primary strategy for preventing hantavirus infection. People suspecting illness are encouraged to contact their local health department.

Medical Practitioners are required under the Notifiable Diseases Act to report a suspected or confirmed case of a Notifiable disease for clients under their care. This enables early case detection and follow-up, minimizing the risk of transmission to others, Notifications on suspicion is particularly important in some instances of highly infectious diseases and conditions that are difficult to diagnose or may have a delay in confirmation of diagnosis. *As **Hantavirus infection** comes under the Notifiable disease category all suspected cases have to be notified to the local health administration, i.e. District Medical Health Officer and Director Public Health in the prescribed performa enclosed.*