

What is hantavirus?

Hantavirus is a virus carried by rodents, and can be passed to humans, causing Hantavirus Pulmonary Syndrome (HPS). This disease is rare and symptoms are much like those of influenza infection, followed by difficulty in breathing.

How is hantavirus spread?

The deer mouse is the most common source of the virus in North America, although many other rodents can also carry it. The virus is shed in the droppings, urine, and saliva of infected rodents. Humans are infected when they inhale dust that contains dried, contaminated rodent urine or feces. Transmission may also occur when dried materials contaminated by rodent feces or urine are disturbed and are directly introduced into broken skin or into the eyes, nose, or mouth. Rodent bites may also transmit the infection.

What are the signs and symptoms of hantavirus infections?

Early symptoms include fatigue, fever, and muscle aches, especially in the large muscle groups- thighs, hips, back and shoulders. There may also be headaches, dizziness, chills, and abdominal problems. Four to ten days after the first phase of illness, a sick person will experience coughing and shortness of breath as the lungs fill with fluid.

How long after infection do symptoms appear?

Since HPS is relatively rare, it is unknown how long after infection symptoms appear. It is believed that symptoms develop after one to five weeks, with an average of three weeks after being exposed to infected rodents.

Who is most at risk?

Anyone who comes in contact with rodents carrying hantavirus is at risk for developing HPS. Any activity that puts you in contact with rodent droppings, urine, saliva, or nesting materials can put you at risk of infection. Potential risk activities include:

- Opening and cleaning previously unused buildings
- Housecleaning activities
- Work-related exposure
- Camping and hiking

What type of health problems are caused by hantavirus infections?

HPS has a high death rate, and has been fatal in over one third of cases reported. However, patients who fully recover from the disease do not experience lasting effects or complications. Some types of hantavirus found in other parts of the world can cause hemorrhages (severe internal bleeding) and kidney failure, but these viruses are also less likely to be fatal.

How is hantavirus infection diagnosed?

For those who have been infected for only a few days, diagnosis is difficult. Early symptoms such as fever, muscle aches, and fatigue are easily confused with influenza. Individuals experiencing these symptoms and have a history of rodent exposure with shortness of breath, should inform their healthcare provider immediately.

How is hantavirus infection treated?

There is not a specific treatment, cure, or vaccine for HPS. However, if infected individuals are recognized early, intubation (opening the airway with a tube) and oxygen therapy can help them through the period of severe respiratory distress. If a person is already experiencing full distress, it is unlikely that the treatment will be effective.

How can Hantavirus Pulmonary Syndrome be prevented?

Get rid of or reduce contact with rodents in your home, workplace, or campsite. Many people who became sick with HPS were in frequent contact with rodents and/or their droppings, but others did not notice rodents or droppings at all. If you live in an area where rodents known to have hantavirus live, keep your home, workplace, or campsite clean.

If you do notice a rodent problem, or want to prevent infestations, there are several steps you can take:

- Seal holes inside and outside the home.
- Trap rodents around the home.
- Clean up rodent food sources and nesting sites by tightly storing all food, pet food, trash, and animal feed.
- Get rid of possible nesting sites outside the home by moving woodpiles far from the house, keeping grass and shrubbery well-trimmed. Elevate hay and trash at least 1 foot off the ground.

How do you properly clean up after rodents?

Trap all live rodents, and seal entryways so no more can get in. After a week of trapping, if no more rodents are captured, then enough time has passed that the urine/droppings or nesting material is no longer infectious. When cleaning:

- Wear gloves to clean urine/droppings and soak the droppings with bleach before picking up with paper towel.
- Clean and disinfect the whole area
- For heavy infestations, use gloves, goggles, protective clothing, and a respirator.

Where can I get more information?

- Your personal healthcare provider
- Utah Department of Health, Bureau of Epidemiology, 801-538-6191
- Centers for Disease Control and Prevention

