

Hantavirus

Frequently Asked Questions

What is hantavirus?

Hantaviruses are a group of viruses that are carried by rodents. One of them, Sin Nombre virus, is found in deer mice in North America. Sin Nombre virus is the cause of Hantavirus Pulmonary Syndrome (HPS) in people.

How are people exposed?

Deer mice excrete the virus in their urine, saliva, and droppings. A person may be exposed to hantavirus by breathing contaminated dust after disturbing or cleaning rodent droppings or nests, or by living or working in rodent-infested settings.

Pets, snakes, and predators don't become infected and can't spread hantavirus infection to people or other animals.

In North America, there is no evidence that the disease spreads from one person to another.

What are the symptoms of Hantavirus Pulmonary Syndrome?

Symptoms begin one to six weeks after inhaling the virus and typically start with 3-5 days of "flu-like" illness including fever, sore muscles, headaches, nausea, vomiting, and fatigue.

As the disease gets worse, it causes shortness of breath due to fluid filled lungs. Hospital care is usually required. It is serious disease and about one out of three people diagnosed with HPS have died.

Where is hantavirus found and how common is it?

The deer mouse (*Peromyscus maniculatus*) is the main carrier of hantavirus in the western United States; however, all wild rodents should be avoided. Deer mice live in all parts of Washington, but mainly in rural areas. Deer mice pass the virus to each other and some of the population is usually infected, but deer mice do not get sick or have any symptoms. In Washington, about 14% of over 1,100 tested deer mice have been infected with Sin Nombre virus.

Since infected deer mice live throughout the state, human cases of hantavirus pulmonary syndrome can occur in any part of Washington. Typically, one to five cases are reported each year.

What does the deer mouse look like?

The deer mouse is about six inches long from the nose to the tip of its tail. It is grayish to light brown on top, with large ears, a white belly, and a furry tail that is white on the underside. There are many other types of mice that don't have those features.



Image Source: <http://www.cdc.gov/hantavirus/rodents/>

How long does hantavirus remain infectious in the environment?

The length of time hantaviruses can remain infectious in the environment is variable and depends on environmental conditions, such as temperature and humidity, whether the virus is indoors or outdoors or exposed to the sun, and even on the mouse's diet (which would affect the chemistry of its urine).

The bottom line is that you can't tell how old a dropping is, so all rodent droppings should be handled as if they are infectious. Areas with ongoing rodent infestation are particularly risky and the recommendations for prevention should be followed.

How do I prevent Hantavirus Pulmonary Syndrome?

Ways of prevention

- Keep rodents out of your home and workplace.
- Always take precautions when cleaning, sealing and trapping rodent-infested areas.
- Seal up cracks and gaps in buildings that are larger than 1/4 inch including windows and door sills, under sinks around the pipes, in foundations, attics and any rodent entry hole.
- Trap indoor rats and mice with snap traps.
- Remove rodent food sources.
- Keep food (including pet food) in rodent proof containers.

Cleaning rodent infested areas

1. Wear rubber, latex, vinyl or nitrile gloves.
2. Do not stir up dust by vacuuming, sweeping, or any other means.
3. Thoroughly wet contaminated areas including trapped mice, droppings, and nests with a 10% hypochlorite (bleach) solution:
 - Mix 1½ cups of household bleach in 1 gallon of water (or 1-part bleach to 9 parts water).
4. Once everything is soaked for 10 minutes, remove all of the nest material, mice or droppings with damp towel and then mop or sponge the area with bleach solution.
5. Steam clean or shampoo upholstered furniture and carpets with evidence of rodent exposure.
6. Spray dead rodents with disinfectant and then double-bag along with all cleaning materials. Bury, burn, or throw out rodent in appropriate waste disposal system.
7. Disinfect gloves with disinfectant or soap and water before taking them off.
8. After taking off the clean gloves, thoroughly wash hands with soap and water (or use a waterless alcohol-based hand rub when soap is not available).

What should I do if I think I have been exposed to mouse droppings?

If you have been exposed to rodents or rodent infested buildings and have symptoms of:

- fever, muscle aches, and severe shortness of breath, see your health care provider immediately.

Inform your health care provider of possible rodent exposure so that he/she is alerted to the possibility of rodent-borne diseases, such as hantavirus pulmonary syndrome.

Report your fear of exposure to your supervisor