

Facts



HANTAVIRUS Q and A

1. What is hantavirus and hantavirus pulmonary syndrome (HPS)?

Hantavirus is a virus found in rodents, especially deer mice. It is not a new virus but it has only been detected since 1993 when it was found to be the cause of hantavirus pulmonary syndrome, or HPS. HPS is a rare but serious illness. The illness was first detected in the southwestern United States. No cases of HPS have been found in Ontario.

2. What is the source?

Rodents, especially deer mice, are the primary carriers of hantavirus. The deer mouse (pale grey or reddish brown with white fur on the feet and belly) can be found in all parts of North America with the exception of Arctic Canada and some of the southwestern states of the United States. The habitat of the deer mouse is primarily rural and semi-rural wooded areas, but generally not urban area. The deer mouse should not be confused with the more common house mouse, which is not known to carry hantavirus.

3. How is it spread?

Hantavirus is spread to people when they inhale the virus or dust particles contaminated by infected rodent droppings, urine or saliva or by a bite from an infected rodent. Hantavirus does not cause disease in pets or livestock and is not transmitted from these animals to people. Hantavirus is not spread from one person to another. Hantavirus is not spread by food or water. Hantavirus is not spread by ticks, fleas, black flies, mosquitoes, and other biting insects.

4. What are the symptoms of HPS?

Early symptoms resemble a "flu-like" illness and other viral infections with symptoms of fever, muscle aches and chills.

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5. Is HPS a new disease?

No, HPS is not a new disease. There is no evidence that it is increasing or spreading and it remains an extremely rare disease. What is new is our ability to detect the virus and recognize HPS, which was first described in New Mexico in May of 1993. Hantavirus has likely been present in deer mice for a long time and may have caused a small number of unrecognized cases of HPS in the past. In the United States, cases have been found with an onset as early as 1970. In Canada, 6 cases of HPS have been confirmed in British Columbia, 9 in Alberta and 2 in Saskatchewan since 1990. No cases have been identified east of Saskatchewan.

6. How serious is HPS?

HPS is a serious disease. About half of the cases result in death.

7. How likely am I to be exposed to it?

Most people in Ontario will never be exposed to hantavirus. People whose occupation brings them into close contact with rodents, particularly deer mice (ie. wild life biologists and pest control officers), have a greater chance of being exposed to hantavirus although the chance of their developing HPS is extremely remote. A recent US study involving mammologists and rodent workers with frequent exposure to deer mice suggests that infection is rare even in this group of workers who are continually exposed to reservoirs of hantavirus. None of the workers studied had symptoms or illness suggestive of HPS.

Activities such as sweeping out mouse infested cottages or sheds, or other buildings left vacant over the winter, or camping directly on uncovered ground in rodent infested areas may increase the chances of breathing in dust particles contaminated by droppings, urine or saliva from infected rodents. Common sense measures for protection should be taken as in question 9 below.

8. Is there a treatment for HPS?

Yes, patients with HPS are treated in hospital, often in intensive care. Early treatment of respiratory problems will improve the chances of complete recovery.

9. How can I protect myself?

Potential sources of the virus can be eliminated by removing rodents from the home. Use spring-load traps in infested areas. Rubber or plastic gloves should be worn when handling dead rodents and then rinsed in disinfectant, such as laundry bleach, when finished. Dispose of dead mice in a plastic bag, twist tie it and place it in the regular garbage. Poison or baits to control rodents can

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also be used but they are not a good idea unless other control measures have failed. Poisoned animals crawl away to die and their decomposing bodies not only smell bad but can be hard to find. Poisons can also harm children and pets. Consult a pest control professional and follow the guidelines below.

- Use approved rodenticides in baits
- Set the bait in areas where children or pets don't have access
- Place baits inside a covered box with an opening
- Place the covered bait station close to a "runway" (where the mouse droppings are observed)
- Set traps perpendicular to the wall

Measures can be taken to mouse-proof buildings and surrounding area by:

- Sealing any holes on the outside of buildings that might give access to rodents
- Storing food and feed in containers with tight lids
- Putting pet food and water away at night

When cleaning up mouse droppings use a wet method, such as wet-wiping or mopping with a disinfectant like household bleach. Avoid using dry methods, such as dusting, sweeping or vacuuming. If cleaning is done in an unventilated space where there are rodent droppings, a filter mask should be worn.