#### **Prevention and Precautions**

Since the mice themselves do not get sick, and show no signs of infection it is best to assume all mice, their droppings and saliva carry the virus. Be safe, and treat all rodents as potential carriers of hantavirus or other diseases.

It is wise to avoid exposure to mouse droppings, saliva and urine, by taking proper precautions:

- Do not handle live wild rodents.
- Do not touch or disturb mouse nests or burrows.
- Do not vacuum, dry sweep or use an air hose to clean areas where rodent droppings are present, until disinfected.
- Do not occupy rodent infested buildings until cleaned.
- Do not drink untreated surface water.
- Do not sleep in un-cleaned cabins.

For additional information regarding cleaning and disinfection for areas procedures with mouse infestations, refer to the pamphlet "Keep Your Cabin Free of Rodents" which is available on our website. In addition, the Canadian Federation of Humane Societies has published a fact-sheet, "Living with Urban Wildlife - Mice & Rats", describing humane methods of controlling these rodents.

For more information, please contact your local Community Health Office or the Animal Health Division.

References and Links:

"Keeping Your Cabin Rodent-Free":

http://www.nr.gov.nl.ca/agric/animal diseases/public safety/default.stm

"Hantavirus in Deer Mice"; Canadian Centre for Occupational Health and Safety:

www.ccohs.ca/oshanswers/diseases/hantavir.html

Public Health Agency of Canada:

www.phac-aspc.gc.ca

**US Center for Disease Control:** 

www.cdc.gov

Other information pamphlets are available online from the Department of Natural Resources at:

www.nr.gov.nl.ca/agric/

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# Hantavirus in Deer Mice



Hantaviruses are a group of viruses recently identified in North America as being a risk for human health.

People are often exposed to this virus when cleaning or disturbing an area where deer mouse droppings have accumulated or the mice have nested, such as cabins, garages, sawmills, or even by disturbing wild burrows.

## Spread by Rodents

In various parts of North America, different wild rodents may be responsible for the spread of this disease. In Canada, the primary carrier is the deer mouse (*Peromyscus maniculatus*). The deer mouse is usually dark gray or reddish brown with a white belly and feet, and big, rounded ears.



**Deer Mouse** 

Not all deer mice are carriers of the virus, but all who carry the virus, shed the virus. The virus excreted in their droppings, urine and saliva can contaminate areas that are shared with humans.

#### Illness in Humans

Other than the rodent species directly involved with spreading the virus, no other animals are known to spread it and only humans are known to get sick from this virus. For example, if a cat eats a hantavirus infected mouse, the cat will neither become ill nor spread the disease.

The virus is often contracted by inhalation of moisture or dust aerosols created when people clean rodent urine and saliva, or dry rodent droppings. An individual may contract the disease through broken skin or when consuming contaminated water or food. Person-to-person transmission has not been reported within North America.

Hantavirus Pulmonary Syndrome (HPS), is the disease caused by hantavirus infection. Individuals with this disease become very sick, and many die. Flu-like symptoms appear on average 2-3 weeks after exposure to the virus: fever, chills, head and muscle aches, accompanied with shortness of breathe, rapid heartbeat and gastrointestinal problems. As the name suggests, the disease eventually leads to respiratory failure.

Though the actual number of people affected by this disease is described as being quite low, reports indicate 40-60% of HPS sufferers result in fatality. Since there is no vaccine and no known cure for hantavirus infection, early recognition of symptoms and immediate medical treatment will aid in recovery. Prevention is the best method of dealing with this disease.

### Canada and North America

In 1993, a new respiratory illness in humans was named in the southwestern US (Four Corners Region). Though not a new disease, it was only at that time that the actual virus causing the disease was identified, and thus the disease was named *Hantavirus Pulmonary Syndrome* (HPS).

Initially, HPS was only associated with hot and dry areas. HPS has since been found in other areas in North America including Canada.

Reported cases of HPS in Canada are usually limited to the western provinces. With the exception of the Territories and far northern regions of the provinces, the deer mouse, is known to live in all areas of Canada. Collection and testing of deer mice from across Canada, has shown that the virus exists in all regions except Nova Scotia, PEI, the North West Territories and Nunavut. Surveillance in some regions of Canada is limited, so not finding hantavirus, does not mean that it is not present.

#### **Newfoundland Cases**

Surveillance in Newfoundland and Labrador has shown that the virus exists on the southwest coast (Robinson's area). It is assumed however, wherever the deer mouse exists, the potential for the hantavirus also exists.

The deer mouse is found in Labrador and is thought to have inhabited the Island of Newfoundland since at least the 1950's. In Labrador it is mostly found north of Lake Melville. On the Island it is commonly found in the western part of the Island, as far east as Badger. Deer mice have not been reported on the Northern Peninsula. However, they are expected to move across the Island in time.

If you have recently been in an area contaminated by rodents and experience breathing problems with flu-like symptoms, or you are bitten while cleaning up rodents, please see your family doctor immediately.