

## **Hantavirus Information and Prevention**

### **What is Hantavirus infection?**

Hantavirus infection is a rare but serious illness. Typical symptoms are flu-like and include fever, headache, nausea, vomiting, muscle aches, diarrhea, abdominal pain and shortness of breath. These symptoms can occur any time between three days to six weeks (usually occurring around 14 days) after exposure. Infection without symptoms is rare. Disease due to infection with North American Hantaviruses is called Hantavirus Pulmonary Syndrome (HPS).

Although not believed to be caused by a new virus, the condition was first described in the southern United States in 1993. Hantavirus Pulmonary Syndrome is rare in Canada. Laboratory-confirmed cases of HPS have been reported in Canada since active surveillance began in 1994. All of these cases have been in western Canada (two in Manitoba). There have been several deaths. Many of these cases were caused by exposure to the virus in or around the home, or during ranch or farm work, with all cases occurring in rural settings.

### **How is Hantavirus infection spread?**

The usual host of this virus is the deer mouse, although other rodent species have been shown to be infected. The deer mouse can be pale gray to reddish brown, and has white fur on its belly, feet and underside of the tail. It is found widely throughout the United States and Canada. The deer mouse lives primarily in rural and semi-rural areas, but can also reside in urban centers. Although deer mouse numbers may vary with habitat and location, a recent survey in southern Manitoba found that deer mice were the dominant species representing over 95% of the mice caught. Deer mice frequently invade homes, old buildings or barns, and sometimes cars, riding mowers and grain augers.

Hantaviruses are rarely, if ever, spread from person to person, and this has never been documented in North America. Hantaviruses are not spread from pets or livestock. However, cats and dogs may bring infected deer mice into contact with humans.

The virus spreads to people when they:

- Breathe air contaminated by deer mouse saliva, urine or feces containing infectious hantaviruses; or,
- Accidentally rub eyes, mouth or broken skin with hantavirus-infected deer mouse saliva, urine or feces.

### **Prevention Indoors and Outdoors**

#### **INDOORS**

- Keep a clean home, especially kitchen (wash dishes, clean counters and floor, keep food covered in rodent-proof containers).
- Keep a tight-fitting lid on garbage, discard uneaten pet food at the end of the day.

- Set and keep spring-loaded rodent traps. Set traps near baseboards because rodents tend to run along walls and in tight spaces rather than out in the open.
- Set Environmental Protection Agency-approved rodenticide with bait under plywood or plastic shelter along baseboards. These are sometimes known as "covered bait stations." Remember to follow product use instructions carefully, since rodenticides are poisonous to pets and people, too.
- Seal all entry holes 1/4 inch wide or wider with lath screen or lath metal, cement, wire screening or other patching materials, inside and out.

If bubonic plague is a problem in your area, spray flea killer or spread flea powder in the area before setting traps. This is important. If you control rodents but do not control fleas as well, you may increase the risk of infection with bubonic plague, since fleas will leave rodents once the rodents die and will seek out other food sources, including humans.

## **OUTDOORS**

- Clear brush, grass and junk from around house foundations to eliminate a source of nesting materials.
- Use metal flashing around the base of wooden, earthen or adobe homes to provide a strong metal barrier. Install so that the flashing reaches 12 inches above the ground and six inches down into the ground.
- Elevate hay, woodpiles and garbage cans to eliminate possible nesting sites. If possible, locate them 100 feet or more from your house.
- Trap rodents outside, too. Poisons or rodenticides may be used as well, but be sure to keep them out of the reach of children or pets.
- Encourage the presence of natural predators, such as non-poisonous snakes, owls and hawks.
- Remember, getting rid of all rodents isn't feasible, but with ongoing effort, you can keep the population very low.

If you have any questions or concerns about Hantavirus or you would like more information, you can contact the Sierra County Health Department at 993-6701. Additional information can be obtained from the Centers for Disease Control and Prevention by going to [www.cdc.gov/ncidod/diseases/hanta/hps/index.htm](http://www.cdc.gov/ncidod/diseases/hanta/hps/index.htm).