

# PUBLIC HEALTH FACT SHEET

## Hantavirus Pulmonary Syndrome (HPS)

Massachusetts Department of Public Health, 305 South Street, Jamaica Plain, MA 02130

### **What is hantavirus?**

Hantavirus is a type of virus (germ) found in some rodents. Some hantaviruses can cause a rare but deadly disease in people called hantavirus pulmonary syndrome (HPS).

### **How is hantavirus spread?**

The virus is carried by rodents, including mice. Infected rodents spread the virus in their saliva, feces, and urine. People are infected when they inhale dust that contains dried rodent urine or feces. The virus may also spread when dried materials contaminated by rodent feces are disturbed and get into broken skin or the eyes, nose, or mouth. Rarely, people can also get HPS from a mouse or rat bite. Hantavirus is not spread from person-to-person.

### **How common is HPS and where in the United States is it most often found?**

HPS is rare. Between 1993 and 2005, a total of 396 cases were reported in the United States. The majority of those cases were identified in the Southwest, from the states of New Mexico, California, Arizona and Colorado. To date, there has not been a confirmed HPS case acquired in Massachusetts.

### **What are the symptoms of HPS and how soon after exposure do they appear?**

Many cases of HPS begin with flu-like symptoms. These symptoms are high fever, muscle aches, cough, and headache. After a few days these symptoms quickly worsen. The lungs fill with fluid, which leads to severe respiratory problems. Most symptoms develop within two weeks of being exposed.

### **How is HPS diagnosed?**

HPS is diagnosed by specific laboratory tests.

### **How is HPS treated?**

There is no specific treatment for HPS. Patients are usually given supportive medical care in an intensive care unit.

### **What is the best way to prevent HPS?**

There is no vaccine to protect against hantavirus. The best way to prevent HPS is to avoid contact with rodents or their feces, urine, and saliva—particularly in areas of the United States where HPS is most common. You can prevent rodents from getting inside your home by sealing all openings greater than ¼ inch. You should also reduce rodent nesting sites and food sources within 100 feet of your home. You can do this by clearing away trash and dense shrubbery. Store all food (including pet food and water) and garbage in tightly sealed containers, as this will reduce a source of attraction for rodents.

## **How should rodent urine or droppings in a house be cleaned up?**

Do not sweep or vacuum mouse or rat urine, droppings or nests. This will cause dust particles to go into the air where they can be breathed in. Wear rubber or plastic gloves and spray the urine and/or droppings with a disinfectant or a mixture of bleach and water. Make sure you get the soiled area very wet. Let the area soak for five minutes and then use a paper towel to wipe up. After discarding the paper towel in the garbage, mop or sponge the area with a disinfectant or bleach solution. Wash your hands both before and after taking off your gloves. For homes with a severe infestation problem, additional precautions and/or assistance from a pest control professional may be necessary.

## **How should a dead rodent be disposed of?**

Wear rubber or plastic gloves when handling any dead animal, including rodents. Spray the dead rodent and surrounding area with a disinfectant or a mixture of bleach and water. Let it soak for five minutes. Place the dead rodent in a plastic bag and seal tightly. Place the full bag in a second plastic bag and seal. Throw the bag into a covered trashcan that is regularly emptied. Wash your hands after taking off your gloves and dispose of the gloves, carefully avoiding contact with the outer surface of the gloves. Reusable rubber gloves should be cleaned with disinfectant or bleach solution.

## **Where can you learn more?**

- For more information about keeping your home free of rodents, contact an exterminator or pest control service. See your local telephone book.
- For more information about HPS, call the Massachusetts Department of Public Health, Division of Epidemiology and Immunization at (617) 983-6800 or toll free at 1-877-394-8747 or visit the Centers for Disease Control and Prevention website: [www.cdc.gov/ncidod/diseases/hanta/hps/](http://www.cdc.gov/ncidod/diseases/hanta/hps/).

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