

## NEWS COLUMN

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August 25, 2011

### Be Aware of Hantavirus

Hantavirus is a potentially fatal disease caused by a virus carried by rodents. Hantavirus can result in Hantavirus Pulmonary Syndrome (HPS) which causes the lungs to fill with fluid resulting in respiratory failure.

First detected in the southwestern US in 1993 nationally diagnosed cases of Hantavirus have totaled over 400. In the last several years, South Dakota has reported a handful of cases of HPS a majority of which have been in the eastern part of the state.

Hantavirus can affect young and old, male or female, any race, living almost anywhere. Anything that puts you in contact with rodent droppings, urine, or nesting materials is a risk for HPS.

Symptoms will usually appear within two weeks of exposure. Early symptoms are fever (101-104°), fatigue, shortness of breath, and muscle aches. Half of the people infected with HPS will also develop headaches, dizziness, chills, abdominal pain, vomiting and diarrhea.

If you have been around rodents or their environment and have any of the previously mentioned symptoms contact your doctor immediately. Be sure to tell your doctor that HPS is a possibility based on your recent surroundings. This will alert the doctor to look closely for diagnosed signs of HPS.

HPS infection is caused by breathing in the Hantavirus. It is shed through urine, droppings, and saliva of infected rodents. When fresh rodent urine, droppings, or nesting materials are stirred up, tiny dust particles containing the virus get into the air which is inhaled. You cannot get HPS from human to human contact.

Though there is no specific treatments for HPS, if the symptoms are recognized early patients are intubated and given oxygen to help them through the period of severe respiratory distress.

Rodent control in around the house is the best way to prevent HPS infection. Eliminate contact with rodents in the house and when cleaning out buildings. Those who work in crawl spaces such construction and utility workers may be at higher risk.

Following are some very specific tips to reduce the risk of exposing yourself to Hantavirus (HPS).

### Indoors

1. Use steel wool, cement, wire screen, or other patching materials to seal all entry holes ¼ inch or larger (the size of a dime) around roofs, attics, basements, windows, doors, foundations, vents, air conditioners, and under sinks and other pipes. **Note, if you trap inside your home, but do NOT seal up rodent entry holes, new rodents will enter.**
2. Keep a clean home, especially the kitchen. Wash dishes, clean counters and floor, keep food covered in rodent-proof containers.
3. Keep a tight-fitting lid on garbage, discard uneaten pet food at the end of the day.
4. Set and keep spring-loaded rodent traps near baseboards because rodents tend to run along walls and tight spaces rather than out in the open. Before setting trap, treat area with flea killer.
5. Set EPA-approved rodenticide with bait under plywood or plastic shelter along baseboards. Follow product use instructions carefully, since rodenticides are poisonous to pets and people, too.

### Outdoors

1. Clear brush, grass, and junk from around the house to eliminate a source of nesting materials. Use thick plastic or metal containers with tight lids for garbage and for storing pet food.
2. Use metal flashing 12" above to 6" down into the ground around the base of wooden, earthen, or adobe homes to provide a strong barrier.
3. If possible, locate hay, woodpiles, and garbage cans 100 feet or more from the house and elevate at least 12" off the ground.

4. Trap or poison rodents outdoors too. Just be sure to keep poisons out of the reach of children or pets.

### **Clean up**

1. When going into cabins or other outbuildings that may be infested, open them up and air them out for at least 30 minutes before cleaning.
2. Wear latex rubber gloves. Don't stir up dust. Thoroughly wet contaminated areas with detergent, general purpose disinfectant, or 10% household bleach solution (1½ cups of household bleach per gallon of water). Once everything is wet, mop or sponge up. Don't use vacuum cleaners or brooms, since they may create aerosols.
3. Spray dead rodents, urine or droppings with a disinfectant or the bleach solution from step 2. Soak for 5 minutes before wiping up with a paper towel or rag. Place cleaning materials, mouse, trap and nesting materials in a plastic bag and seal it. Place in a second bag and seal that as well.
4. Wash gloved hands with soap and water before removing gloves; after taking off gloves, thoroughly wash hands with soap and water.
5. For heavy rodent infestations, seek help from professional exterminators.