



Diseases Fact Sheet - Hantavirus

South Dakota Department of Health

Office of Disease Prevention Services - 605-773-3737 -(1-800-592-1861 in South Dakota only)

This material is provided for informational purposes only and is not a substitute for medical care. We are not able to answer personal medical questions. Please see your health care provider concerning appropriate care, treatment or other medical advice.

What is it?

Hantavirus is a potentially deadly disease caused by a virus carried by rodents. Hantavirus can cause Hantavirus Pulmonary Syndrome (HPS) which causes the lungs to fill with fluid and can cause respiratory failure.

The hantavirus was first detected in 1993 in the Four Corners area of the southwestern United States. Since 1993, approximately 400 cases have been reported in the United States. South Dakota has reported a total of 13 cases of HPS since 1993, 69% of which have been East River and 31% West River.

Who gets hantavirus infection?

You can be young or old, male or female, any race, living almost anywhere to be exposed to the hantavirus. Anything that puts you in contact with rodent droppings, urine or nesting materials is a risk for HPS.

What are the symptoms of hantavirus infection?

If a person is infected with hantavirus, symptoms will usually appear within two weeks of exposure. Early symptoms are fatigue, fever (101-104°), and muscle aches. About half of the people infected with hantavirus will also develop headaches, dizziness, chills and gastrointestinal problems such as nausea, vomiting, diarrhea and abdominal pain. Later symptoms include coughing and shortness of breath.

If you have been around rodents and have symptoms of fever, deep muscle aches and severe shortness of breath, see your doctor immediately. Be sure to tell your doctor that you have been around rodents - this will alert your doctor to look closely for any rodent-carried disease such as HPS.

How is hantavirus spread?

Hantavirus infection is a serious, life-threatening illness caused by breathing in the hantavirus. The virus is shed by infected rodents in their urine, droppings and saliva. When fresh rodent

urine, droppings or nesting materials are stirred up, tiny dust particles containing the virus get into the air which can be inhaled. **You cannot get hantavirus from another person.**

What is the treatment for hantavirus infection?

There is no specific treatment for hantavirus pulmonary syndrome. If the symptoms are recognized early, the patient should be taken to an intensive care unit. The earlier the patient is brought into intensive care, the better. In intensive care, patients are intubated and given oxygen to help them through the period of severe respiratory distress.

How do I prevent Hantavirus Pulmonary Syndrome?

Rodent control in and around the home is the best way to prevent hantavirus infection. Eliminate or minimize contact with rodents in the home and especially when cleaning outbuildings. Construction or utility workers who work in crawl spaces may be at risk and campers and hikers should try to avoid rodent infested areas.

Indoors

1. Use steel wool, cement, wire screen, or other patching materials to seal all entry holes $\frac{1}{4}$ 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.

Related Sites:

- [Centers for Disease Control and Prevention](#)