

HANTAVIRUS CARDIOPULMONARY SYNDROME

What is Hantavirus Cardiopulmonary Syndrome (HCPS)?

HCPS is a rare, but often fatal, disease of the lungs. HCPS was first recognized in 1993 in the southwestern United States. Although many hantaviruses exist in nature, HCPS in the western U.S. is caused by a specific hantavirus called Sin Nombre virus (SNV). Cases of HCPS occur throughout the U.S. but are most common in the Southwest.

How are hantaviruses maintained in nature?

Hantaviruses are maintained in nature in wild rodents. In California, only deer mice carry and shed SNV. Other rodents such as squirrels, chipmunks, and house mice are rarely, if ever, infected and do not pose a risk of HCPS to humans.

How do you get HCPS?

Infected rodents shed hantavirus in their urine, droppings, and saliva. Most HCPS patients become infected by breathing air contaminated with rodent urine or droppings, such as when cleaning out a rodent-infested space. This most commonly occurs in small, confined spaces where there is little air circulation. Rarely, individuals can also be infected by: 1) consuming food contaminated with rodent urine or droppings; 2) touching surfaces where rodents have been, and then putting their hand in their mouth; 3) being bitten by an infected rodent.

What are the signs and symptoms of HCPS?

Persons first develop symptoms one to two weeks after exposure to SNV. Early symptoms of HCPS include fever, headache, and muscle aches, especially the thighs, hips, back, and shoulders. Other early symptoms include dizziness, chills, nausea, vomiting, diarrhea, and abdominal pain. After two to seven days of these symptoms, patients develop breathing difficulties that range from cough and shortness of breath to severe respiratory failure. Approximately 40 percent of HCPS patients die from the disease.

How is HCPS diagnosed?

Persons with HCPS can be readily diagnosed by specific blood tests.

What treatment is recommended for HCPS patients?

Currently, there is no specific treatment for HCPS. However, if infected individuals are recognized and hospitalized early, supportive care can improve their chance for survival. Patients with severe respiratory disease can require intensive support of their heart and lung function.

How can I avoid getting HCPS?

Avoid contact with all wild rodents, their droppings, and nesting materials. Store all food items securely in rodent-proof containers. Examine the outside of all buildings and seal any holes or other areas that would let rodents get inside. Before entering an

enclosed area that may be contaminated with rodent material, allow it to air out for several hours. Surfaces where rodents may have been should be wetted with a dilute bleach solution before mopping up. Do not use a broom or vacuum to clean potentially contaminated areas. Promptly dispose of all cleaning materials when done, and wash hands and clothes.

Where can I find more information about HCPS?

The Centers for Disease Control and Prevention has information available at their website <http://www.cdc.gov/ncidod/diseases/hanta/hps/index.htm>