

## **Hantavirus Pulmonary Syndrome**

Agent: Hantavirus family

Mode of Transmission: Several different types of hantaviruses that can cause hantavirus pulmonary syndrome (HPS) have been identified in the United States and each is associated with a different rodent species. Rodents infected with hantavirus do not become ill, but they can transmit the virus to humans when their urine, feces, or saliva are aerosolized and inhaled. While uncommon, other ways in which people may be exposed to the virus are rodent bites and direct contact between contaminated materials and a person's nose or mouth. Person-to-person transmission does not occur.

Signs/Symptoms: Early symptoms include fever and muscle pain, and may also include gastrointestinal complaints, headaches and dizziness. These symptoms may be accompanied by or followed by an abrupt onset of respiratory distress and decreased blood pressure. Respiratory failure and shock follow quickly.

Prevention: Rodents should be excluded from houses and other buildings. Protective measures include disinfecting rodent-contaminated areas with a spray disinfectant solution prior to cleaning. Approved respirators should be used to avoid inhalation of dust when cleaning or removing potentially infected materials, particularly in areas of heavy rodent infestation. Contaminated areas should be cleaned with a wet mop and not be vacuumed or swept so as to decrease the likelihood of creating an aerosol containing the virus.

Other Important Information: Although most common in the southwestern part of the country, hantavirus infections can occur anywhere. The most important hantavirus in the United States is the Sin Nombre virus for which the deer mouse (*Peromyscus maniculatus*) is the primary reservoir.

No cases of hantavirus pulmonary syndrome (HPS) were reported in Virginia during 2013. The only hantavirus case reported in Virginia occurred in 1993. In 2004, a resident of southwest Virginia died due to HPS following an exposure that occurred in West Virginia. For surveillance purposes, that case was attributed to West Virginia.