

**The University of Tennessee
Institutional Animal Care and Use Committee
Occupational Health Program**

HANTAVIRUS

People at Risk: Anyone that has contact with rats and/or mice may be at risk of contracting hantavirus. The virus is most often found in wild rodents, especially mice and voles; however, some cases have occurred in laboratory rodents.

Transmission: The virus is shed in respiratory secretions, saliva, urine, and feces of infected rodents. Transmission may also occur through contaminated equipment, animal bites, and inhalation of particles of the secretions in an enclosed space.

Symptoms: Different strains of the virus produce different symptoms. A form of the disease causes fever, back pain, and kidney infection but the patient usually recovers. Another form of the disease seen in the United States causes fever, muscle ache, headache, and cough, progressing to respiratory failure and death. The form of the disease that was observed in laboratory animal facilities consisted of fever, headache, muscle pain, anemia, intestinal bleeding, blood in urine, and petechia (red spots on skin from bleeding).

Diagnosis and Prevention:

Prevention of human infection in laboratory animal facilities is by elimination of infected rodents prior to entering the facility. A blood test (serology) is available to test both animals and people. If working with infected animals, the worker should use protective clothing (lab coats, gloves, face and respiratory protection), practice good personal hygiene, and decontaminate cages and waste. If working with infected deer mice, animal biosafety level 4 is needed (sealed glove boxes or fully enclosed barrier suits).