

HOW TO AVOID HANTAVIRUS PULMONARY SYNDROME (HPS)

Hantaviruses belong to a family of viruses spread predominantly by rodents and cause a variety of disease syndromes around the world.

Hantavirus pulmonary syndrome (HPS) is a severe respiratory disease in humans that can be fatal. HPS is typically caused by hantaviruses found in the Americas known as “New World” hantaviruses. Vectors include deer mice, cotton rats, rice rats and white-footed mice. In contrast, hemorrhagic fever with renal syndrome (HFRS) is typically caused by “Old World” hantaviruses found mostly in Europe and Asia. Vectors for HFRS include striped field mice, brown or Norway rats, bank voles and yellow-necked field mice.

RECOGNIZING AND AVOIDING HPS

DIAGNOSIS

- Symptoms usually appear two to four weeks after infection but can appear as early as one week or as late as six weeks after infection.
- Initial symptoms can be flu-like: headache, joint pain, fever, abdominal pain, nausea and vomiting.
- The primary symptom is difficulty breathing caused by fluid buildup in the lungs.

PREVENTION:

- Protect your hands: wear gloves appropriate for handling animals, wear rubber gloves while cleaning or disinfecting, and wash hands once gloves are removed.
- Control dust around cages or nesting areas: Air out rodent-infested places at least 30 minutes before cleanup, spraying or wetting down areas where droppings, nesting or related materials are found with an appropriate disinfectant.
- Wear respiratory protection: Use an N95-fitted respirator or other protection when working with rodents known to have a higher risk of transmitting viruses that cause HPS.

TRANSMISSION:

- Hantavirus is shed through the affected rodent’s urine, droppings, and saliva.
- Airborne transmission to people is the most common and usually occurs when infected urine, droppings, or nesting materials are stirred up.
- Transmission of the virus can also occur if an infected rodent bites a person, although this type of transmission is rare.
- There are no recorded cases of person-to-person transmission to date in the United States. However, in Chile and Argentina there have been rare cases of Andes virus (a type of hantavirus) transmitting person-to-person via close contact.

EXPOSURE AND TREATMENT

If you believe you have been exposed to hantavirus at work, notify your supervisor as soon as possible. Report the exposure immediately to the Biosafety Occupational Health Program (BOHP). You will then be referred to a qualified occupational health provider for consultation and any necessary treatment.

For questions, contact BOHP at 979-845-6649 or bohp@tamu.edu.