

# Hantavirus

## Occupational Viral Infection from Handling Rodents

### What is Hantavirus?

Hantavirus is a group of several viruses that are found throughout the Americas, Europe, and Asia. Rodents carry these viruses and may spread them to humans.

### How does infection occur?

Infection can be transmitted through direct contact with an infected animal, through animal bites or breathing in contaminated air from the environment (e.g., sweeping a cabin which aerosolizes rodent urine and feces present in the cabin). Rodent saliva, feces, and urine can also contaminate food and water, which if ingested, can result in infection.

### What are the symptoms?

Symptoms can vary depending on the type of Hantavirus. Symptoms usually start 2 to 4 weeks after initial exposure. These range from flu-like symptoms like fever, chills, headache, joint pain. Other symptoms of nausea, vomiting, and diarrhea have also been reported. The virus found in the Americas can cause coughing, shortness of breath, and possibly severe lung disease. This is called Hantavirus Pulmonary Syndrome (HPS). Hantavirus in Europe and Asia is known to cause kidney damage. This is called hemorrhagic fever with renal syndrome (HFRS). Signs include abnormal urination, red mucous membranes, and excessive bleeding. Rapid kidney failure can potentially lead to death.

### How do I prevent it?

Do not touch wild rodents. Keep animal feed in a rodent proof container. Wear appropriate PPE such as gloves and a mask when cleaning anywhere rodents have been. Thoroughly wash hands after contact with wild rodents or potentially contaminated materials.

### How is it treated?

Supportive care is given to help treat Hantavirus.

### Resources used:

- The Center for Food Security and Public Health Zoonotic Disease Factsheets: Hantavirus
- The Center for Food Security and Public Health Zoonotic Transmission Routes: Hantavirus
- List of Zoonoses - Special Pet Topics – (2016) *Merck Veterinary Manual* 11<sup>th</sup> ed.
- Chapter 28, Selected Zoonoses, (2015) *Lab Animal Medicine*, 3rd ed.