

FACT SHEET

HANTAVIRUS

The following information will help you to become familiar with the epidemiology, symptomatology, ecology, and control of *Hantavirus*.

WHAT IS HANTAVIRUS?

Hantaviruses are serologically related rodent viruses belonging to the Bunyaviridae family. These viruses cause Hemorrhagic Fever with Renal Syndrome, an acute human illness characterized by fever, hemorrhagic manifestations, and often renal involvement.

HOW IS HANTAVIRUS TRANSMITTED?

Hantaviruses are excreted in the saliva, urine and feces of infected rodents. Humans may be infected by inhaling aerosols of dried excreta, inoculation through the conjunctiva, or entry through broken skin.

WHAT ARE THE SYMPTOMS?

Hantaviruses produce Hemorrhagic Fever with Renal Syndrome (HFRS), an influenza-like disease that may progress to acute renal failure. There are two distinct types of symptoms involved, viral and hemorrhagic. The acute viral disease is characterized by an abrupt onset of fever lasting 3 to 8 days, conjunctival infection, prostration, backache, headache, abdominal pain, anorexia, and vomiting. Hemorrhagic manifestations may appear from the third to the sixth day, followed by proteinuria, hypotension and sometimes shock. Renal abnormalities may be mild, or progress to acute renal failure and continue for several weeks.

HANTAVIRUS IN EUROPE.

Two primary types of Hantavirus exist in Europe; Balkan and Puumala. The rodent reservoir for Balkan hantaviruses are *Apodemus* species (field/wood mice). The primary rodent associated with Puumala hantavirus is the red bank vole.

Puumala virus is observed mainly in western Europe, Scandinavia, and in the western lands of the former Soviet Union. Mortality

from Puumala virus is usually less than one percent, with as many as 95 percent of infections being subclinical.

Balkan varieties of hantavirus are more severe in nature, with mortality rates ranging from 10 to 20 percent.

HOW IS HANTAVIRUS PREVENTED?

Rodent control is the first, and best step in limiting Hantavirus exposure to humans. All personnel must keep living and working areas void of food products, garbage, and debris that may attract and harbor rodents.

Unit Field Sanitation teams must actively control rodents. Prior to beginning a major rodent control operation, treat infested areas with an appropriate pesticide to control ectoparasites such as fleas and ticks. Rodent snap traps can be an effective means to control rodents. Bait snap traps with peanut butter and place traps in areas that the rodents are known to frequent. Large infestations may also require the use of rodenticides.

Always spray disinfectant on the dead rodent, trap, droppings, and surrounding area where the rodent has been. Liquid bleach (3 tablespoons per gallon of water), or any other household disinfectant can be used to kill the virus. Using rubber gloves, or a plastic bag over the hand, carefully remove the rodent, double bag it in plastic and seal. Dispose of the dead rodent by incineration if possible.

When cleaning floors, minimize stirring up dust (which may potentially carry the virus as air-borne particles) by first spraying the area with disinfectant, then mop or wet sweep the floor with a soap and disinfectant solution. Wash hands thoroughly with soap and hot water after all cleaning operations.

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