

HANTA VIRUS

(Clean-up Procedures and Protective Measures)

RISK:

- The risk is specifically associated with contact with the deermouse but does not rule out other rodents such as: other mice, packrats, chipmunks or ground squirrels.
- High risk environments will be encountered when disturbing nesting materials, burrows, droppings and surrounding soil, etc.
- The risk is higher in enclosed environments.

TRANSMISSION:

- Hanta Virus is transmitted in the urine, saliva and feces of the rodent.
- It is transmitted when the rodent secretions are disturbed and the dust created is inhaled into the lungs of a person.
- The virus has also been shown to be transmitted by rodent bites.
- Direct contact with contaminated rodents will increase the risk of the virus inhalation.
- Once outside the body of the rodent, the virus likely does not survive for long periods (hours or days). Further studies are being conducted.
- The virus is inactivated by most disinfectants (dilute solution of bleach or most household disinfectants).

Dust suppression and disinfectant of rodent contaminated material are the major principles of prevention.

SYMPTOMS:

Only non-specific symptoms are present before respiratory distress occurs.

Infected individuals have non-specific flu-like symptoms such as:

- fever
- muscle pain and ache
- cough
- headache
- nausea, vomiting

The presence of the above symptoms is not specific for Hanta Virus and can be caused by many ailments.

The only **specific** symptom of Hanta Virus disease is very serious and is characterized by the sudden onset of difficulty in breathing that rapidly worsens.

Individuals experiencing pneumonia like symptoms should seek immediate medical attention and inform caregivers of rodent exposure.

PREVENTION:

There are four major areas in the prevention of infection with the Hanta Virus:

1. Use appropriate rodent control.
 - Controlling the population of rodents in enclosed spaces will obviously greatly minimize the risk.
2. Avoid infested areas and avoid creating dust.
 - Dust suppression (by wetting down infested areas with diluted disinfectant and allowing it to soak for 15 minutes will minimize the airborne contaminants).
3. Use appropriate clean-up procedures.
 - Regular/effective cleaning and sealing procedures for outdoor equipment and worksites where this hazard could exist.

RODENT CONTROL:

Since rodents are the main carrier, it is important to, whenever possible, avoid an infestation by using appropriate rodent control.

There are several ways to control or minimize the rodent population in an area and some are listed below.

- Keep area clean.
- Commercial traps and rodenticides.
- Use a commercial ultra-sonic device in enclosed area as appropriate.
- Seal all openings of more than a quarter inch diameter.
- Use metal flashings at the base of wooden or earthen structures.
- Eliminate food sources and nesting sites by keeping food and garbage covered and stored in rodent proof container.
- Remove spilled foods and dispose of trash promptly away from the facility.
- Cut grass, bush and dense shrubbery within 100 feet of the home.

Inspection of buildings is necessary to ensure effective rodent control.

HANTA VIRUS CLEAN UP KIT CONTENTS:

The following are the basic contents of a standard clean-up kit.

Follow the practices of your particular organization:

- disposable coveralls
- gloves
- goggles
- spray bottle
- 4" funnel – for pouring bleach into spray bottle
- germicidal detergent/dry bleach – 1 pkg./disinfectant
- garbage bags (2)
- paper towelling
- hand wipes
- disposable respirator

10 STEPS TO HANTA VIRUS CLEAN-UP:

1. Put on disposable clothing and gloves (found in Hanta Virus Kit).

2. Put on goggles and disposable respirator mask and test mask for fitness (ensure goggles effectively protect eyes and do not interfere with the seal of the respirator).
3. Mix disinfectant solution in spray bottle.
4. Gently spray droppings/rodent nesting materials with the bleach, ensuring they are completely soaked – AVOID CREATING DUST.
5. Allow sprayed material to sit for 15 minutes. If circuits or cabinets cannot be sprayed, dampen some towelling or soak the towelling and leave for 15 minutes before removing.
6. Remove the soaked materials carefully, using gloved hands.
7. Leftover materials should be swept up or vacuumed with a hepa filter vacuum cleaner.
8. Place the soaked materials into Bag #1 and tie shut. Place Bag #1 into Bag #2. While continuing to wear the glove, remove goggles, disposable respirator mask and disposable clothing and place them in Bag #2. Remove gloves carefully and place them in Bag #2. Seal Bag #2 and place it in the garbage for disposal.
9. Clean hands with hand cleaner. Be sure to wash hands and face with soap prior to eating or smoking.
10. To prevent re-infestation, seal any opening used by the rodents to gain entry to the facility and replace any damaged parts.
11. Notify the supervisor or manager of the infestation.

Remember that the chances of getting Hanta Virus Disease are very low, but the consequences of getting it are very serious.