

HANTAVIRUS PULMONARY SYNDROME (HPS)

Case definition

CONFIRMED CASE

Clinical illness with laboratory confirmation of infection:

- Detection of IgM antibodies to hantavirus

OR

- Detection of a significant (e.g. fourfold or greater) increase in hantavirus-specific IgG

OR

- Detection of hantavirus RNA in an appropriate clinical specimen

OR

- Detection of hantavirus antigen by immunohistochemistry

Causative agent

Four hantavirus species have been implicated as causative agents for HPS in North America. The largest proportion of HPS cases has been associated with the *Sin Nombre virus*.

Source

The major source for the *Sin Nombre virus* is the deer mouse. Antibodies have also been found in other rodents.

Incubation

9 to 35 days.

Transmission

Aerosol transmission from rodent feces and urine.

Communicability

Person-to-person spread has not occurred in North America.

Symptoms

Characterized by:

- A febrile (>38. 3° C oral) illness requiring supplemental oxygen
AND
- Bilateral diffuse infiltrates [may resemble acute respiratory distress syndrome [ARDS]]
AND
- Develops within 72 hours of hospitalization in a previously healthy person
OR
- An unexplained illness resulting in death plus an autopsy examination demonstrating non-cardiogenic pulmonary edema without an identifiable specific cause of death

Diagnostic testing

Contact your local laboratory

Treatment

There is no proven effective antiviral therapy. Clinical management depends on careful fluid administration [avoid over-hydration] and ventilatory support.

PUBLIC HEALTH MANAGEMENT & RESPONSE

Case management

Contact and educate the individual and/or family.

Discuss the role of public health. Provide information to the individual or family and provide fact sheets.

- Inquire about recent activities and travel, and where the individual has been living.
- Explore whether there has been contact with rodents.
- Inquire about type of housing and any evidence of rodent infestation.
- Educate other household members on how to avoid contact with rodents.

Surveillance forms

novascotia.ca/dhw/populationhealth/surveillanceguidelines/Other_Disease_Case_Report_Form.pdf

General Information Sheet

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