Communicable Disease Epidemiology and Immunization Section



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Health Advisory – Hantavirus Case in King County, 30 December 2021

Action Requested

- Be aware of a recent case of Hantavirus Pulmonary Syndrome (HPS) reported in a resident of southeast King County.
- Consider HPS in patients with compatible clinical presentation
 - Prodromal symptoms are nonspecific and last 3-5 days. These may include fever fatigue, myalgias (especially in the large muscle groups), headache, dizziness, chills, nausea, vomiting, diarrhea, and abdominal pain.
 - Four to 10 days after initial onset of illness, <u>late symptoms and signs of HPS</u> may appear, including cough, shortness of breath, interstitial infiltrates, rapidly progressive non-cardiogenic edema/ARDS, and hemodynamic compromise. Consider consultation with an ID specialist.
- Take a history for risk factors for hantavirus exposure in patients with compatible clinical presentation. Incubation period for HPS ranges from several days to 8 weeks.
 - Risk factors include exposure to areas with rodent infestation (deer mouse in WA state), nesting materials, and excreta including in the home, through recreational or occupational activities, entering seasonally closed/infested structures or buildings, and possibly through infested automobiles (including potentially cabin air filters, vents, ducts, & interiors).
- If HPS is suspected, a CBC and blood chemistry should be repeated every 8-12 hours.
 - A decrease in serum albumin and an increase in hematocrit may indicate a fluid shift from the patient's circulation into the lungs.
 - WBC count tends to be elevated with a marked left shift and atypical lymphocytes are frequently present, usually at the time of onset of pulmonary edema.
 - In about 80% of individuals with HPS, the platelet count is <150,000 units. A dramatic decrease in platelet count may indicate a transition from the prodrome to the pulmonary edema phase of illness.
- Obtain commercial hantavirus serology (IgM and IgG) testing in suspected cases. All positive specimens should be forwarded to the Washington State Public Health Laboratory.
- Report suspected and confirmed HPS cases within 24 hours to Public Health at (206) 296-4774.

Background

Hantavirus infections are rarely identified in King County, with only 8 cases reported since 1997. Prior to this newest report from December 2021, the last case of HPS was in March 2017, when we had a cluster of three locally acquired cases diagnosed between December 2016 to March 2017. Typically in WA, one to five cases are reported each year and about one out of three people diagnosed with HPS have died.

Health care providers should be familiar with risk factors for hantavirus exposure, including infested homes, garages, cabins, workspaces, and automobiles (and potentially their air handling system, including filters, vents, ducts). Some patients may not recognize or report exposure to rodents, rodent infestation, or nesting materials.

Of the eight cases in King County, four had likely exposures to rodent droppings in a garage setting, two reported a recurrent rodent infestation in or around their home and property, one reported a recurrent infestation in the air system of their vehicle, and one case reported sweeping up rodent droppings in a yurt. Five of these eight cases had likely exposures in King County.

Resources

<u>CDC | Hantavirus Information for Clinicians</u> <u>Public Health – Seattle & King County | Hantavirus Pulmonary Syndrome Website</u> <u>WA State Department of Health | Hantavirus Information</u> <u>CDC | COCA: Identification and Care of Patients with Hantavirus Disease, June 2016</u>