Mono County Resident Dies of Hantavirus Infection

A Mono County resident recently died of hantavirus infection (North American hantavirus is also called Sin Nombre Virus). This is the first fatality caused by hantavirus this year in California, and the third confirmed hantavirus case in Mono County in 2019.

This tragic loss is a reminder of the risk of hantavirus in the Sierra, a known region of exposure in the United States. People may catch hantavirus by inhaling virus that is shed in mouse waste (urine and feces) of infected deer mice. About one in three people with hantavirus infection die. One cannot catch this virus from another person.

Exposure to hantavirus typically occurs indoors where mouse waste may have accumulated. Opening up seasonally closed cabins, homes, and outbuildings during late spring and summer poses our most common risk of infection, however, this case and a non-fatal one which occurred in January of this year demonstrate that infection can occur all year around. State and county health department experts have investigated the case-patient’s residence and place of employment, finding evidence of mice in and around the home. Exposure at the workplace in Inyo County was found to be unlikely because minimal signs of mice were found.

Hantavirus illness begins with a fever and flu-like symptoms, such as headache and body aches, typically one to five weeks after inhaling the virus. Gastrointestinal symptoms such as vomiting, diarrhea and abdominal pain are common in the early part of the illness. Respiratory symptoms, including cough and feeling short of breath, are not present at first, but may develop after a few days, signaling increased chance of deadly respiratory and heart failure. When people start having trouble breathing their condition may rapidly worsen to become critical. There is no specific treatment for hantavirus infection, but high-level intensive care has allowed many people with life-threatening illness to survive.

Diagnosis and timely transfer to higher level hospitals is challenging as the disease can progress rapidly before diagnostic testing can be completed.

Most people who become ill with hantavirus report some exposure to rodents in the preceding weeks, typically while cleaning a room or a shed that has been closed-up for some time with mice living there.

To decrease risk of hantavirus infection open windows and doors of a potentially contaminated area and allow it to air out for at least 30 minutes before cleaning. Sweeping, vacuuming or other activities that stir up dust and dirt that may contain mouse waste should be avoided. Spray rodent carcasses, nests, droppings, and other potentially contaminated items and surfaces with a 10% bleach solution (1 part bleach with 10 parts
water) or a disinfectant made to kill viruses (check the label). Allow the solution to sit on the material for at least 5 minutes before wiping. Mice incursion in vehicles may also pose some hantavirus risk, especially if mice infest the heating and air conditioning system. Inspect vehicles for rodents.

It is prudent to minimize mouse entry points at home and at work, although it may be challenging to completely mouse-proof some buildings. Mice may enter through very small gaps under doors or around windows and where conduits and vents pass through walls. Heating and air conditioning ducts should be periodically inspected for holes.

The California Department of Public Health has more hantavirus information at:
https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/HantavirusPulmonarySyndrome.aspx.

County Health Department and Environmental Health staff can provide advice about dealing with specific situations encountered at home or at work.

FOR MORE INFORMATION CONTACT:

Dr. Tom Boo, Mono County Public Health Officer
tboo@mono.ca.gov
760.924.1828

Dr. James Richardson, Inyo County Health Officer
healthofficer@inyocounty.us
760.873.7868