

Hantavirus Infection (including Pulmonary Syndrome)

Hantavirus Infection (including Pulmonary Syndrome) is a Class B Disease and must be reported to the state within one business day.

Hantavirus pulmonary syndrome (HPS) became nationally notifiable in 1995. HPS is a febrile illness characterized by clinical symptoms resembling acute respiratory distress syndrome (ARDS) or bilateral diffuse interstitial edema. Infection is also characterized by a relatively short febrile prodrome, myalgias, headache, chills, dizziness, non-productive cough, and gastrointestinal (GI) complaints. In more severe cases, patients may develop severe pulmonary edema and hypotension. Patients may progress, although rarely, to disseminated intravascular coagulation (DIC).

Non-HPS infection is considered to be a febrile illness with non-specific viral symptoms including fever, chills, myalgia, headache, and GI symptoms; but no cardio-pulmonary symptoms. Non-HPS infections typically also have clinical laboratory findings including hemoconcentration, left shift in WBC count, neutrophilic leukocytosis, thrombocytopenia, and circulating immunoblasts. In 2014, surveillance expanded to include reporting of all laboratory confirmed hantavirus infections (HPS and non-pulmonary hantavirus infection).

The primary risk factor for hantavirus exposure is rodent infestations in and around the home. Occupational exposures have been recognized, but are rare. Humans acquire infection primarily through inhalation of infectious aerosolized rodent saliva or excreta.

Hantavirus infections are rarely reported in Louisiana. Several cases have been caused by a unique hantavirus named Bayou virus. The Bayou virus infection is characterized by Hantavirus pulmonary syndrome with renal insufficiency and intra-alveolar hemorrhage (resembling hemorrhagic fever with renal syndrome (HFRS) associated with a family of Eurasian hantaviruses). The primary reservoir for the virus is thought to be the rice rat, *Oryzomys palustris*.

Since 2006, there have been seven Hantavirus cases reported in Louisiana (Figure 1). Most cases have been associated with rat or mouse-infested buildings. Four of the seven cases reported in Louisiana had exposure outside of the state.

Figure 1. Reported Hantavirus Cases in Louisiana, 2006 – 2023

