

## **Hantavirus in Nebraska**

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Most laboratories are aware that the first case of Hantavirus infection in Nebraska was reported this summer. The infection occurred in a 40-year-old male who had possible exposure to mice while cleaning out grain bins and trucks. Previous to this summer, Nebraska was the only state west of the Missouri river that Hantavirus had not occurred. Although it is known that Hantavirus is carried by rodents, particularly the deer mouse and passed on to humans through urine, saliva or droppings, the lack of a case in Nebraska suggests that all the parameters causing the infection are not fully understood. A screening for Hantavirus in rodent populations has been conducted by the Epidemiology, Toxicology and Vector Surveillance Section of the Nebraska Health and Human Section for a number of years. Antibodies to Hantavirus are generally found in a statewide proximately 6% of animals. In Dundy County where the human Hantavirus infection occurred this summer, the rate is no higher and possibly lower than other counties. The most important issue for the laboratory is accurate testing in humans. Although the original specimen was sent to a reputable reference laboratory, a definitive diagnosis was obtained only after an additional specimen was sent to the University of New Mexico and the CDC. Therefore, the possibility exists that previous cases have occurred in Nebraska but were not accurately diagnosed. This emphasizes the importance of involving the Epidemiology section of the Nebraska Health and Human Services Department or the Nebraska Public Health Laboratory through which the specimen can be expedited. Several warnings were issued early in the year following for possible increased numbers of cases of Hantavirus infection due to the possibility that El Nino would increase vegetation in certain areas of the U.S. leading to an increase in the rodent population. These warnings may have made people aware of the risk associated with cleaning barns or removing rodents nests because the anticipated number of cases did not occur.

Person contemplating trapping or

performing necropsies on rodents in Nebraska should contact Dr. Wayne Kramer for recommendations of transmissions of the virus. It is known that Hantavirus Pulmonary Syndrome (HPS) is caused by a previously unknown group of Hantaviruses of which the Sin Nombre virus is the most common. Previous to 1993, Hantaviruses were known only as the etiologic agents of hemorrhagic fever transmitted by rats.