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Fatal Arenavirus Infections in California

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The California Department of Health Services and the University of Texas Medical Branch recently identified evidence of arenavirus infection in three patients hospitalized with similar fatal illnesses between June 1999 and May 2000. The patients were aged 14, 30, and 52 years; all were female. Two resided in southern California and the third in the San Francisco Bay area. The patients did not have any activities in common, and none had a history of travel outside California during the 4 weeks preceding their illness.

Illnesses were associated with non-specific febrile symptoms including fever, headache, myalgia, and lymphopenia. All

three patients had acute respiratory distress syndrome, and two developed liver failure and hemorrhagic manifestations. All patients died 1 to 8 weeks after illness onset.

Arenavirus-specific RNA was detected in one or more materials from each patient using a nested reverse transcriptase-polymerase chain reaction assay. Family members of the three patients were interviewed about activities and potential exposure sites during the month before illness onset. One patient reportedly cleaned rodent droppings in her home during the 2 weeks before illness onset; no history of rodent contact was solicited for the other two patients.

Arenaviruses are rodentborne enveloped RNA viruses, and several types cause viral hemorrhagic fever syndromes

in Africa and South America. Preventive measures for arenavirus infections include control and exclusion of rodents in and around human dwellings. Direct contact with rodents, their excreta, and nesting materials should be avoided. Areas and surfaces potentially contaminated by rodent excreta should be wet with a disinfectant before removal. Rodent carcasses and materials should be double-bagged before disposal. Although rare, person-to-person transmission has been documented for some New World viruses; nosocomial transmission can occur through direct contact with an infected patient's blood, urine, or pharyngeal secretions.

FROM: Centers for Disease Control and Prevention. Fatal illness associated with a new world arenavirus—California, 1999-2000. *MMWR* 2000;49:709-711.