

## VIRUS ISOLATED FROM SAN DIEGO, LONG BEACH AND LOS ANGELES AREA

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In 1945 a rabies virus was isolated by the author from the brain of a horse from the Long Beach area which had supposedly died of equine encephalomyelitis. Peculiar properties which this virus exhibited made its identification difficult, but this was finally accomplished by immunological means. Its behavior was described to Dr. Harold Johnson, who found it similar to that of the rabies virus isolated from vampire bats and inquired whether it were possible that the horse was bitten by a vampire bat and whether these were found in Southern California. Dr. Johnson suggested that the horse might have been in Lower California, where vampire bats are known to occur, but no such history was obtained. Furthermore, this horse was a race horse, and the owner had no knowledge of its having been bitten by any canine.

Dr. Edwin Lenette of the California State Health Department isolated a virus from the brain of a giraffe from the San Diego zoo which also had some peculiar qualities suggestive of the vampire bat type of virus rabies. This giraffe had been in a wire fenced enclosure, and it was impossible for any dog to enter; it would have been possible, however, for a rodent.

These experiences suggest the possibility that a form of rabies was present in Southern California that was not transmitted by dogs and had the characteristics of vampire bat rabies; the question was also raised whether some vampire bats might have been present in the area, although none had been reported. (Human beings infected with vampire bat rabies do not always die, and recovery with certain residual paralysis is not uncommon.) There is suggestive evidence that rabies transmitted by rodents does occur and that this may have happened in the Long Beach and San Diego areas to a horse and a giraffe respectively.

The theory that rodents actually do transmit rabies has been challenged, but this is certainly a field where more research is necessary. It is also agreed that if rabies were transmitted by rodents, it might be a different type of rabies virus than that transmitted by dogs.

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### VIRUS RÁBICO AISLADO EN LONG BEACH, CAL. (*Sumario*)

En 1945 el A. aisló un virus rábico del cerebro de un caballo procedente de Long Beach, Cal., cuya muerte se había atribuido a encefalomiелitis equina.

El virus aislado se comportó como el virus de vampiros, sin comprobarse que el caballo hubiera estado expuesto a vampiros ni a animales caninos. El hallazgo

por el Dr. Lenette de un virus parecido en una jirafa del Parque Zoológico de San Diego, hizo pensar en la posibilidad de que exista en el sur de California una forma de rabia no transmitida por perros, con características similares a la rabia de los vampiros. Algunos investigadores han sugerido la existencia de rabia en los roedores, que pudieran haber originado los dos casos citados. Sin embargo, esta teoría necesita aun de mayores investigaciones.

## POLIOMYELITIS—SAN ANTONIO AREA—1946

*A report by the Epidemiological Committee, San Antonio City Health Department*

The "Fiesta de San Jacinto," a festival week devoted to indoor and outdoor entertainment, was held in San Antonio, Texas, from April 22 to April 27, 1946. Following this festival there appeared an abrupt outbreak of poliomyelitis. From the first of January to the first of May only one case of poliomyelitis had been reported to the City Health Department in San Antonio. This case was reported early in January. On May 6, the first case of this outbreak was reported to the City Health Department. For the week ending May 11, ten cases were reported for the city and Bexar County; three of these died—two residents of the city and one of the county. On May 11, the Board of Health placed a ban on the city, prohibiting public gatherings for those under the age of twenty-two years. On May 12, members of the State Department of Health and the City Board of Health met and discussed the entire situation in the City of San Antonio and Bexar County. Following this meeting an Epidemiological Committee was set up to aid and advise in the clean-up and attempted control of the disease.

The Committee, in formulating its recommendations for the prevention of poliomyelitis, carefully considered the known facts relating to the characteristics of the virus causing the disease and the available data regarding its possible methods of transmission. Briefly stated, the following were considered:

1. The virus is destroyed by pasteurization, i.e., by exposure to a temperature of 55° C. for 30 minutes.
2. It resists drying for at least one month.
3. It survives in gastro-intestinal secretions for at least two hours.
4. It survives in butter for at least three months; in milk for at least thirty-one days at room temperature; and in water for at least three months at room temperature.
5. Break point chlorination of water destroys the virus.
6. The virus has been found in the mucous membranes of the nasal, nasopharyngeal and tonsillar regions in acute and abortive cases and in apparently healthy individuals, i.e., "carriers" of the infection; it has been isolated from the feces of acute and abortive cases repeatedly.