TRADITIONAL KINSHIP STRUCTURES AND EUROPEAN-DERIVED DISEASES AT MISSION SAN DIEGO, CALIFORNIA: A STUDY OF THE 1805-1806 MEASLES EPIDEMIC

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ABSTRACT

European diseases were a significant cause of morbidity and mortality in Native American communities after contact with any European colonizers. Studies of Native Californian communities have documented the effects of European diseases such as smallpox, measles and whooping cough, but only at a few of the 21 Spanish missions established during the Mission Period and primarily late in the historic period. This study used archival and historical records, combined with later ethnographic materials, to investigate the potential impact of a measles epidemic in 1806. This epidemic was documented at other missions and was known to have caused mortality of up to 25% in certain populations, but no direct evidence of illness was recorded at Mission San Diego.

Using an agent-based model designed to reflect both the structure of the historic population and the behavioral patterns of neophyte populations, simulated measles epidemics in the mission population were examined. Simulation results indicate that the pattern of recorded deaths in the winter of 1805/1806 is not consistent with a virgin soil measles epidemic (as produced by the model), but could not rule out measles as a cause of increased deaths.