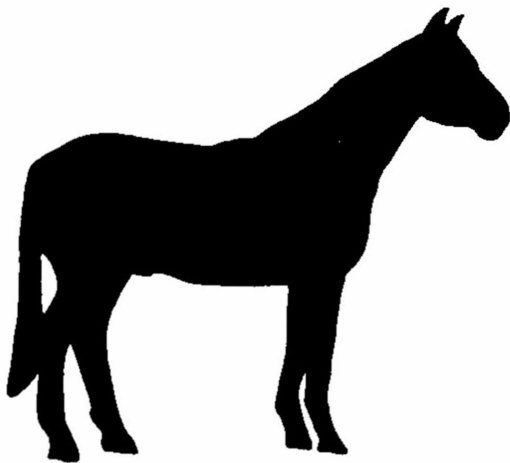
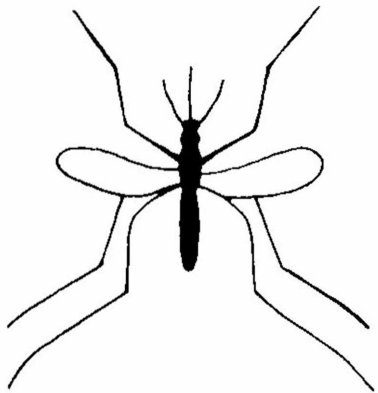


VEE SUMMARY
For August September 1973
Issued October 1973

CENTER FOR DISEASE CONTROL

VENEZUELAN EQUINE ENCEPHALITIS



ZOONOSIS
SURVEILLANCE

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

PREFACE

Summarized in this report is information received from State Health Departments, university investigators, virology laboratories and other pertinent sources, domestic and foreign. Much of the information is preliminary. It is intended primarily for the use of those with responsibility for disease control activities. Anyone desiring to quote this report should contact the original investigator for confirmation and interpretation.

Contributions to the surveillance report are most welcome. Please address to:

Center for Disease Control
Attn: Office of Veterinary Public Health Services
Bureau of Epidemiology
Atlanta, Georgia 30333

SUGGESTED CITATION

Center for Disease Control: Venezuelan Equine Encephalitis Surveillance
August-September, Issued October 1973

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Because of the need to provide information as soon as possible on VEE activity, these surveillance reports will be issued at various intervals--daily, weekly, bi-weekly or monthly--as the urgency of the information demands.

We invite your inquiries or information on VEE and related activities: Center for Disease Control, Office of Veterinary Public Health Services (404) 633-3311, Ext. 3691. Evening or weekend phone numbers:

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I. SUMMARY

No isolations of Venezuelan equine encephalitis (VEE) virus have been reported from vertebrates in North America in the first 9 months of 1973. However, in January 1973, VEE virus was isolated from 1 pool of 50 Culiseta inornata mosquitoes in Xochimilco, D.F., Mexico (see VEE Annual Summary 1972). Mexico has had no human or equine cases of VEE in 1973 and has declared itself free of the disease. Sporadic clinical cases in both man and animals have been reported from several countries in South America. In the United States, surveillance activities are being carried out by a number of cooperating federal, state, and local agencies. Vaccination of horses against VEE is continuing in the United States and Mexico. Both western equine encephalomyelitis (WEE) virus and eastern equine encephalomyelitis (EEE) virus have been recovered from mosquito pools, birds, and equines with encephalitis in the United States. Six human cases of EEE and 2 of WEE were reported from the United States in August.

II. INTERNATIONAL NOTES

In Peru the epizootic of equine VEE that involved 9 provinces in the first 3 months of 1973 has apparently subsided. In April only sporadic equine cases were observed in Piura Province (see VEE Summary July 1973). Peru reported a total of 3,200 equine cases had occurred and that 10,000 equines had been vaccinated with VEE inactivated vaccine. This report is based on clinical diagnosis only, without laboratory confirmation. An outbreak of equine WEE in Argentina, first recognized in November 1972, peaked in March 1973, and apparently ended in June 1973. A total of 2,286 clinical cases were reported, and 76,611 doses of vaccine were administered to equines in the areas of the epizootic. In March 1973, Uruguay reported clinical cases of equine encephalitis (virus unspecified). This is the first outbreak of equine encephalitis reported from Uruguay since 1956. (Source: Vigilancia Epidemiologica, Vol. II, Nos. 4 & 5, June 8, 1973 and July 6, 1973).

In Mexico for the period January 1 through September 24, 1973, 2,400,000 equines were vaccinated against VEE with an attenuated vaccine. Mexico has reported no VEE cases in equines in 1973. (Reported by: Dr. Julio Lona, Ministry of Agriculture and Livestock, Mexico City, Mexico).

III. STATE ACTIVITIES

A. California

As of September 21, 1973, over 3,000 mosquito pools had been tested for the presence of arboviruses. The majority of these were from the Imperial Valley area. While all pools have been negative for VEE virus, 205 isolations of other arboviruses were made. These included WEE virus (83), Turlock virus (59), St. Louis encephalitis (SLE) virus (40),

and other viruses (23). The majority of the other viruses were identified as V4038, a newly recognized virus isolated from a number of pools of Culex tarsalis and still being characterized. Of 52 suspect horse brains and serum samples tested by the State Department of Public Health, none were found to be positive for VEE or WEE. One confirmed WEE case in an equine was reported from Yolo County in August. This appears to be the only confirmed horse case in the state to date this year. While there have been no human WEE cases reported, a single human case of St. Louis encephalitis was reported from Bakersfield. (Reported by: Richard W. Emmons, M.D., Public Health Physician, and George L. Humphrey, D.V.M., Chief, Veterinary Public Health Section, California State Department of Public Health, Berkeley).

B. Arizona

No VEE virus has been isolated in Arizona, however, mosquito pools collected from the southern part of the state have yielded isolations of WEE virus, Turlock virus, SLE virus, and possibly either California encephalitis (CE) or Bunyamwera virus. One chicken in a sentinel flock near Nogales developed antibodies to WEE in August. Four horse cases of WEE have been reported from the state to date this year. No human WEE cases have been reported. (Reported by: Philip M. Hotchkiss, D.V.M., State Epidemiologist, and Mr. Frank Marks, Arizona Department of Public Health, Phoenix).

C. New Mexico

Sentinel poultry flocks located at various points throughout the state are bled at monthly intervals. No chickens have developed VEE antibodies, however, chickens in 7 flocks have developed antibodies against WEE virus and in 2 flocks against SLE virus. To date this year there have been 4 cases of WEE in horses; 2 WEE cases occurred in humans in August. (Reported by: Mr. Bryan Miller, Chief, New Mexico Environmental Improvement Agency, Health and Social Services Department, Santa Fe, New Mexico).

D. Texas

To date in 1973, no VEE virus has been isolated from either animals or mosquitoes in Texas. A few WEE cases in horses have been reported from scattered locations in central and western Texas, and WEE virus was isolated from a nestling house sparrow in Hale County. WEE virus was also isolated from mosquito pools of Culex tarsalis collected in Hale County in August and in El Paso County in August and September. Seven EEE cases occurred in horses in early August in Hardin County (east Texas). While no horse cases have been reported since early August, 1 fatal human case in a child was reported from Jasper, Texas, in late August. Jasper is located approximately 40 miles from the area where the horse cases occurred. Sera from 4 sentinel chicken flocks in Cameron and Starr counties (south Texas) have been examined at the CDC Laboratory in Ft. Collins, Colorado. All specimens to date have been negative for VEE, WEE and SLE antibodies. (Reported by: A. B. Rich, D.V.M., Division of Veterinary Public Health, Texas State Department of Health, Austin and D. Bruce Franczy, Ph.D., Chief, Vector Ecology Investigations Section, Vector-Borne Diseases Branch, CDC, Ft. Collins, Colorado).

E. Southeastern States

State health departments and the USDA have reported a reduction in the number of EEE cases in horses occurring in the 5 southeastern states since July. Florida reported 63 EEE cases in equines in July, 8 in August, and 1 in September. Georgia reported 7 cases in July and none in August or September. South Carolina reported 8 cases in July and 4 in August. North Carolina reported 10 cases in July, 4 in August, and 1 in September. Virginia reported 4 cases in July, 2 in August, and none in September. Florida also reported 2 human EEE cases in August. No other human cases have been reported from the southeast. It appears that the incidence of this disease in horses is decreasing, and with the advent of cooler weather it is anticipated that the number of new cases will continue to decrease. (Reported by: James B. Nichols, D.V.M., Director, Division of Veterinary Public Health, Florida Division of Health; R. K. Sikes, D.V.M., State Public Health Veterinarian, Georgia State Department of Human Resources; T. B. Ryan, D.V.M., Rollins Animal Disease Diagnostic Laboratory, North Carolina Department of Agriculture, Raleigh; Carl E. Boyd, D.V.M., State Veterinarian,

Columbia, S.C.; A. J. Roth, D.V.M., Coordinator, Animal Health Services, Virginia Department of Agriculture, Richmond).

F. New Hampshire

An outbreak of EEE in pheasants and horses occurred in New Hampshire in August and lasted until early September. The disease was first suspected when pheasants at a state game farm in southeastern New Hampshire began dying in large numbers after showing fairly typical central nervous system signs. Increased numbers of horse deaths attributed to encephalitis began about August 15 and peaked in early September. There were approximately 73 horse cases counted during the outbreak; EEE was confirmed in 19 animals. EEE virus was also isolated from pheasants at the game farm and from pigeons in a nearby community. No human cases have been reported to date. (Reported by: Clarence Dearborn, D.V.M., State Veterinarian and Hugh Wilkerson, M.D., Acting State Health Officer, New Hampshire State Department of Health and Welfare, Concord).

G. Massachusetts

An outbreak of EEE occurred in equines in eastern Massachusetts in September. The total number of cases in horses is, as yet, unknown, however, EEE virus has been isolated in 15 cases, 10 of which occurred in the southeastern counties. Two additional cases have been reported from Northfield in the northwestern part of the state, an area not usually affected by EEE. Isolations of EEE virus have also been made from 37 birds from eastern Massachusetts. Mosquito pools collected from the eastern part of the state have yielded EEE virus, with the peak number of isolations occurring in late August approximately 2 weeks before the first horse cases were reported. Extensive spraying of insecticides has been conducted to control mosquito populations. No human cases have been reported. (Reported by: N. J. Fiumara, M.D., State Epidemiologist, M.A. Madoff, M.D., Laboratory Director, R.F. Gilfillan, Chief, Virus Laboratories, Massachusetts Department of Public Health, Boston and C. Bruce Francy, Ph.D., Chief, Vector Ecology Investigations Section, Vector-Borne Diseases Branch, CDC, Ft. Collins, Colorado).

H. Michigan

An outbreak of EEE in equines was reported in Oakland County, Michigan, in August 1973. A total of 19 horse cases were reported, 9 of which occurred in the first 2 weeks of August along a 6-mile section of a single road in the county. Subsequently, 8 other EEE cases in horses were reported from the state, however, they were scattered in several different counties. No human cases have been reported. (Reported by: A. L. Trapp, D.V.M., Veterinary Pathologist, Michigan State University, John Quinn, D.V.M., State Veterinarian, and Donald Coohon, D.V.M., Director, Division of Disease Control and Norman Hayner, M.D., State Epidemiologist, Michigan Department of Public Health, Lansing).

I. New Jersey

Two EEE cases in humans occurred in southern New Jersey in August and a third case in early September. Two of the cases were in young adult females and 1 in an infant girl. To date, 16 EEE cases in horses have been reported from New Jersey, all occurred in the southern half of the state. (Reported by: Ronald Altman, M.D., State Epidemiologist, New Jersey State Department of Health, Trenton).

IV. USDA ACTIVITIES

USDA veterinarians continue to investigate all reported cases of equine encephalitis in equines. Between August 1 and September 25, specimens from 271 equines diagnosed as clinical cases were submitted to the Veterinary Services Diagnostic Laboratory, Ames, Iowa. Of these, 54 were positive for EEE and 74 for WEE. As of September 26, 1973, USDA had received reports that 70,264 equines in the United States had been vaccinated against VEE. (Reported by: Bob Mathis, D.V.M., Equine Diseases Section, Animal and Plant Health Inspection Service, USDA, Hyattsville, Maryland).

ERRATUM: VEE Summary for July 1973, issued October 1973 under INTERNATIONAL NOTES, First paragraph, 4th line, should read "...As of April 1, 6,230 equines..."

**STATE EPIDEMIOLOGISTS AND
STATE PUBLIC HEALTH VETERINARIANS**

Key to all disease surveillance activities are the State Epidemiologists, who are responsible for collecting, interpreting, and transmitting data and epidemiologic information from their individual States. Their contributions to this report are gratefully acknowledged. In addition, valuable contributions to zoonoses surveillance reports are made by State Public Health Veterinarians.

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*Dual assignment