

West Nile Virus

Introduction

West Nile virus (WNV) is a vector-borne virus that was recognized in the Western Hemisphere for the first time in 1999. Mosquitoes circulate the virus among wild birds. Occasionally, the virus is introduced into other vertebrate populations, such as humans or horses, that serve as incidental hosts. Incidental hosts are infected animals that do not pass the virus on to vectors (mosquitos, in this case). This disease has had a devastating effect on the equine community.

Background

Between 1999 and 2002, many horses have been clinically affected with West Nile fever and many of those horses died. The economic and medical losses to the owners and the industry are significant.

In 2001, the virus spread to 21 states, reaching as far south as Florida, and as far west as Wisconsin. Hardest hit was Florida: out of a nationwide total of 631 verified cases in 2001, 492 were from Florida. The rate of death in affected horses in Florida was 21.3%. The rate was slightly higher nationwide at 22.5%.

Administrative Action

At the urging of the horse industry, the Department of Agriculture (USDA) conditionally licensed a vaccine in July 2001, and vaccination begun in affected states. Vaccination requires two inoculations three weeks apart before antibody protection develops. In some cases, horses exposed to the virus between the first vaccination and the second vaccination developed the disease. However, evidence indicates that the vaccine is effective and very safe.

The spread of West Nile virus has caused some countries, namely Argentina and Brazil, to place import restrictions on horses from the U.S. Europe did not place restrictions in 2001, opting instead to require that WNV be treated as other equine encephalidities, such as Eastern and Western. Vaccination is accepted by the EU, provided it is done within a specified time period before export. Brazil accepts no U.S. horses from states where WNV has been detected. Argentina will not accept horses that have been on a site that is within 30 km of an affected location. Horses that are allowed to travel can be vaccinated for WNV, but they must blood test negative to WNV antibodies. These rules are not scientifically based and, in fact, are contradictory. Their implementation has had a significant negative impact on trade to Argentina.

The economic impact on the horse industry of the outbreak in 2001 has not been determined, but is expected to be in the millions. In 2000, the estimated loss in the state of New Jersey alone was \$6 million.

Current Status

The virus is now firmly established in the U.S. and is expected to spread further west and south. New WNV cases in 2002 were confirmed in February in Florida and Louisiana. And a human case of WNV was diagnosed last fall in the Cayman Islands,

indicating the virus has moved beyond the U.S. The virus will continue to affect this country's equine population and impact the economic well-being of our industry.

AHC Position

The American Horse Council supports and encourages the use of the conditionally licensed equine vaccine against West Nile virus. Horse owners should vaccinate their horses annually as they do for other encephaliditic diseases. West Nile virus has had a devastating impact on our highly valued equine population and we are concerned about its continued presence in the country.

With WNV's established presence in the western hemisphere, the American Horse Council encourages the USDA to work with our trading partners to establish movement protocols based on sound science.