

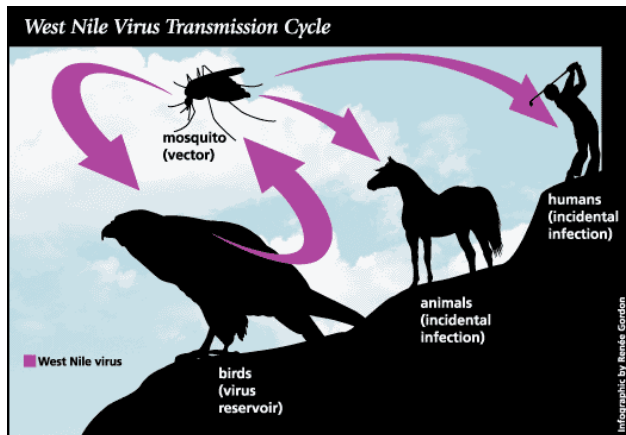
# West Nile Virus Diagnostic Kit Information Paper

Tool to detect disease developed by DoD and its partners



**Product name:** West Nile virus dipstick  
**Commercial name:** VecTest WNV/SLE Antigen Assay  
**Application:** Assay to detect West Nile virus infection in insect vectors  
**Fielded:** 2001  
**Company of manufacture:** Medical Analysis Systems, Inc.

**Target microorganism/associated disease:**  
West Nile Virus (WNV) was first isolated and identified in 1937 in a febrile person in the West Nile district of Uganda. Prior to 1999, WNV caused only infrequent and mild febrile illnesses, mostly in Israel and Africa. After the mid-1990's, more notable outbreaks occurred in Romania, Russia and Israel causing significant neurologic disease in hundreds of persons. The first WNV infections in North American birds, horses and humans were noted in 1999. Since that time, there have been thousands of cases of WNV infection in humans in the U.S. alone.



WNV is a single-stranded RNA virus related to Japanese encephalitis and St. Louis encephalitis. Humans and equines become infected via the bite of infected mosquitoes, and mosquitoes become infected after feeding on infected birds. WNV can cause fever, headache and flaccid paralysis in humans. Older persons and patients with diabetes mellitus are particularly at risk for severe disease.

**Product information:** The VecTest assay is a simple, rapid (15 minute) screening test for the detection of West Nile Virus and/or St. Louis encephalitis virus in mosquitoes, which was fielded in 2001 and is sold by Medical Analysis Systems, Inc.



**Reasons for development:** The WNV Vec Test was designed so that preventive medicine personnel could detect the presence of West Nile Virus and/or St. Louis encephalitis virus in mosquitoes, and initiate appropriate measures to prevent spread of these viruses to the local human population.

**Role of Department of Defense in product development:** The product was supported by the U.S. Army's Small Business Innovative Research Program.

**Current status:** There is a high demand for this assay in north American countries including the U.S. at the present time because of the spread of West Nile Virus in this area of the world over the last few years. VecTest WNV/SLE is a highly profitable item for Medical Analysis Systems.

