

West Nile Virus Testing Wrap-Up

by Steven Hinrichs M.D., Director, NPHL and
Josh Rowland, State Training Coordinator, NPHL

As we are nearing the end of West Nile Virus (WNV) testing here at the Nebraska Public Health Laboratory (NPHL), we can finally reflect on the large volume of testing that was performed. To date, the NPHL tested over 11,000 serum and cerebral spinal fluid specimens for the presence of WNV antibody. The IgM capture ELISA screening test used by NPHL resulted in over 2000 positive results.

The first WNV sample collected for testing at NPHL was June 4, 2003. NPHL reported it's first positive on July 1, 2003. The following graph (**Figure 1**) depicts the volume of positive results per week determined by the NPHL during the WNV season.

The NPHL closely monitors the positive test result rate as a measure of proper test utilization. Our experience over time has shown that positive rates are heavily dependant on disease prevalence. We have also observed that over-utilization of a test will greatly decrease positivity rates. This over-utilization may be driven by patients seeking to know their immune status even if the are asymptomatic. In the absence of a disease outbreak a positive rate of 7% to 10% is typical. The graph illustrates that the positivity rate remained relatively constant throughout the outbreak this season. An average positivity rate of 18% indicates that physicians appropriately selected the individuals for testing.

During the outbreak, the Nebraska Health and Human Services System (NHHSS) provided WNV testing for Nebraskans without charge until October 23, 2003. West Nile Antibody IgM serum screening continues to be offered at NPHL; however, there will be a \$50.00 charge for each test. Please contact NPHL Client Services if you wish to submit specimens.

