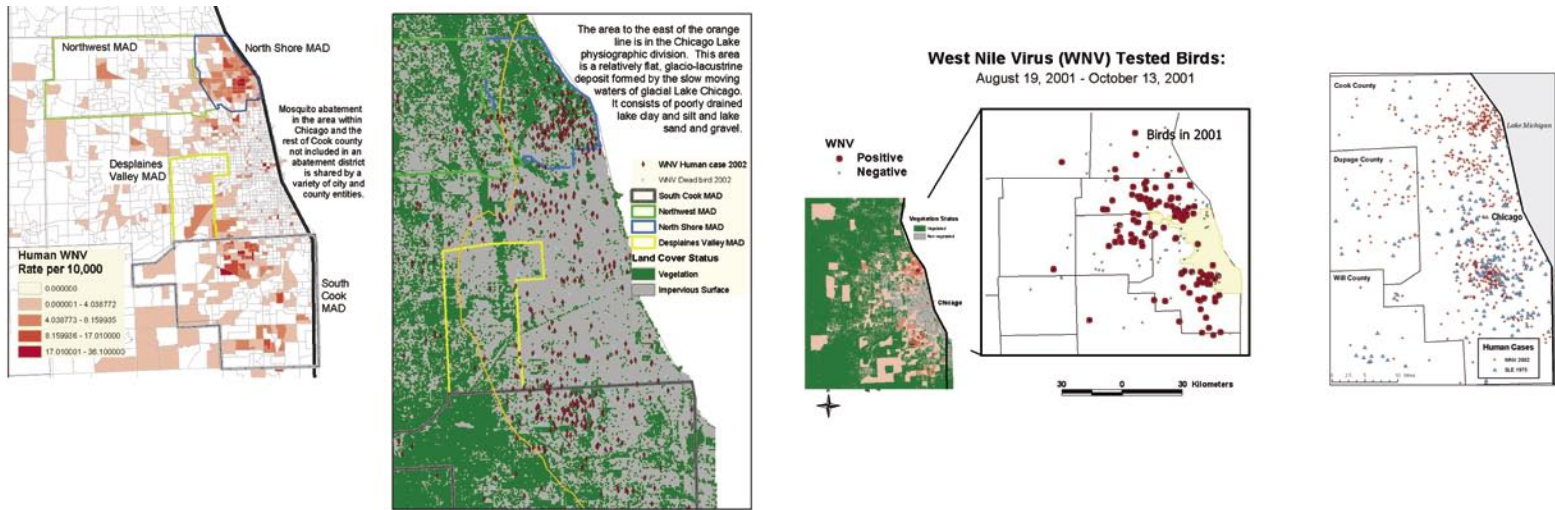
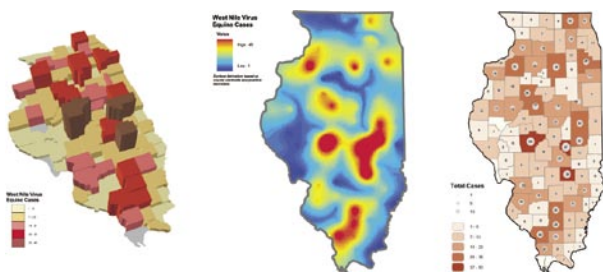
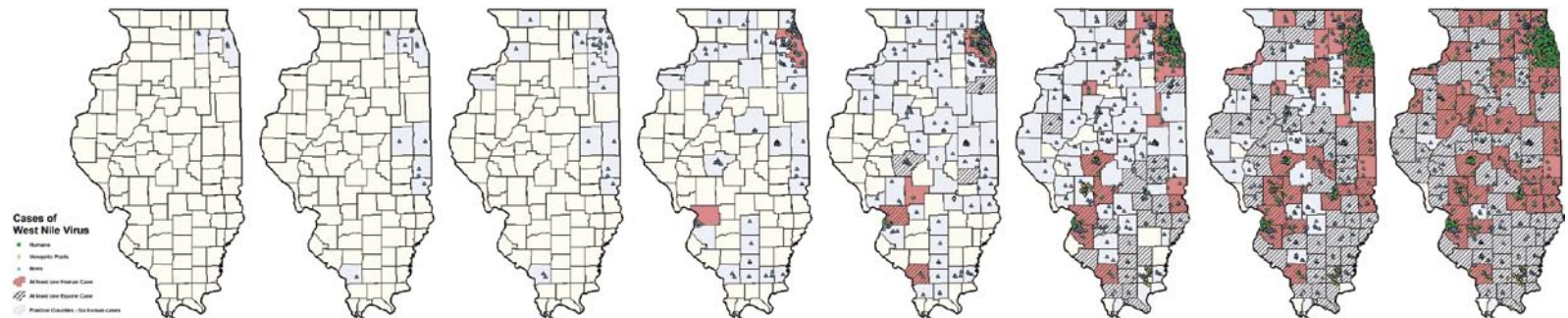


West Nile Virus in Illinois—2001 and 2002



Progression from May 5 to October 10



Spatial Analysis and Mapping of West Nile Virus in Illinois

West Nile virus has spread across the nation since it was first observed in the New York City area in 1999. In 2001, West Nile virus was found in dead birds in only a few Illinois counties. During the following year, Illinois topped all states in the number of human cases of West Nile virus, logging more than 877 cases and 63 deaths. The counties of Cook and Dupage, in the Chicago region, accounted for approximately 80 percent of those cases. In the course of the 2002 season, it spread through the bird, mosquito, horse, and human populations, with cases across the state.

Spatial analysis and sequential mapping are useful and powerful tools to explore the patterns and processes related to the introduction and spread of a new disease. The College of Veterinary Medicine GIS and Spatial Analysis Lab and the Spatial Epidemiology Lab helped the Illinois Department of Public Health and Illinois Department of Agriculture with mapping and analysis of the West Nile virus in Illinois during the recent outbreak. The images demonstrate the various mapping approaches taken and a summary analysis of the human case clusters that occurred in the Chicago region

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Software

ArcGIS 8, ArcIMS 4 for Red Hat Linux, ArcSDE 8 for Red Hat Linux, CorelDraw 11, Red Hat Linux 7.3, and Windows 2000

Printer

HP 500 Designjet

Data Source(s)

Illinois Department of Agriculture and College of Veterinary Medicine, Illinois Department of Public Health

Health and Human Services