



Maryland Arboviral Surveillance Update, 2010

Zoonotic Disease Update 2011

June 23, 2011



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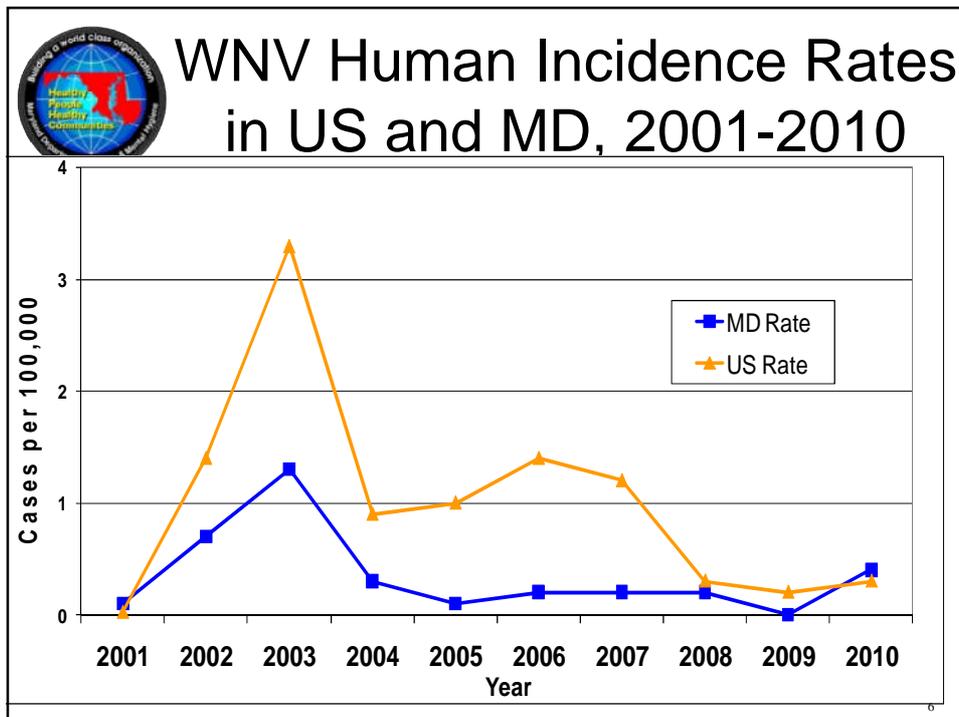
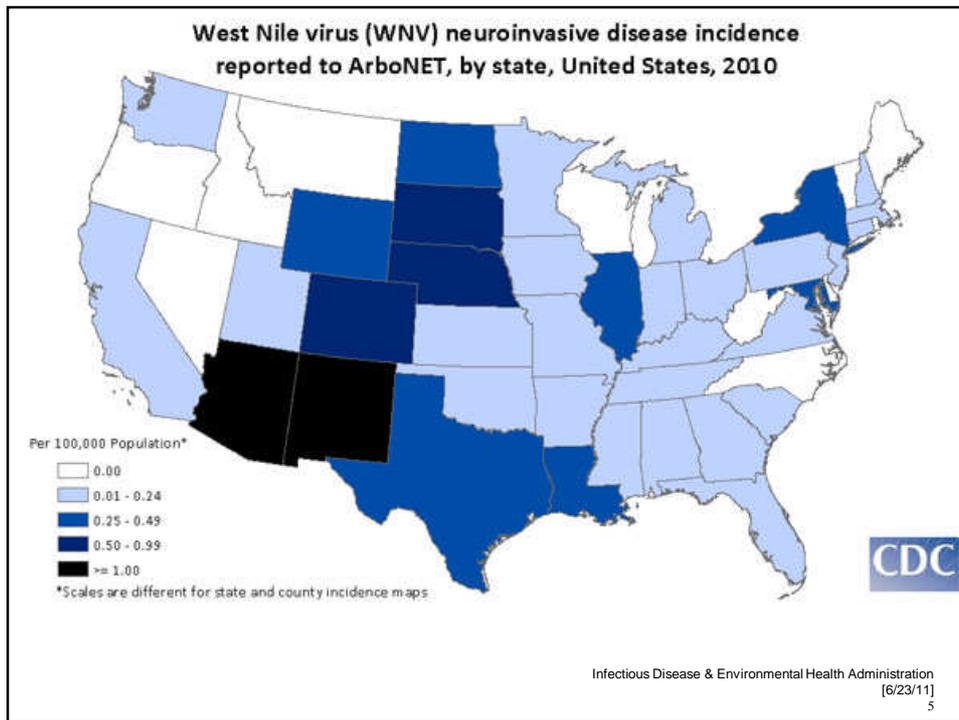
Chief, Rabies and Vector-borne Diseases
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MISSION

- To improve the health of Marylanders by reducing the transmission of infectious diseases, helping impacted persons live longer, healthier lives, and protecting individuals and communities from environmental health hazards
- We work in partnership with local health departments, providers, community based organizations, and public and private sector agencies to provide public health leadership in the prevention, control, monitoring, and treatment of infectious diseases and environmental health hazards.

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Maryland Human WNV Cases, 2010 (n=23)

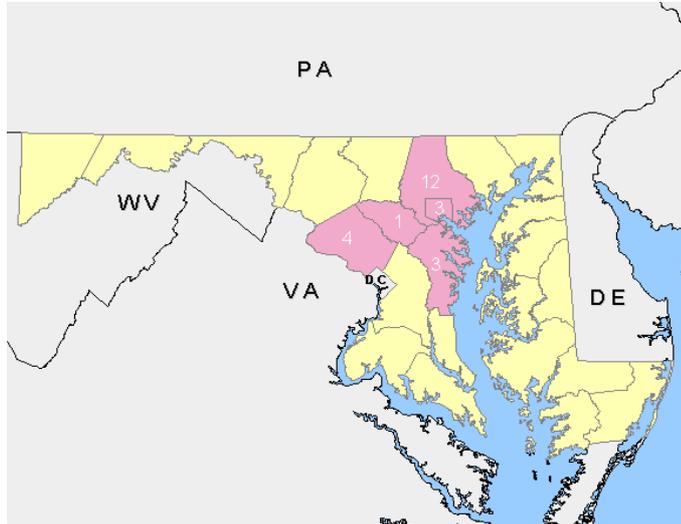


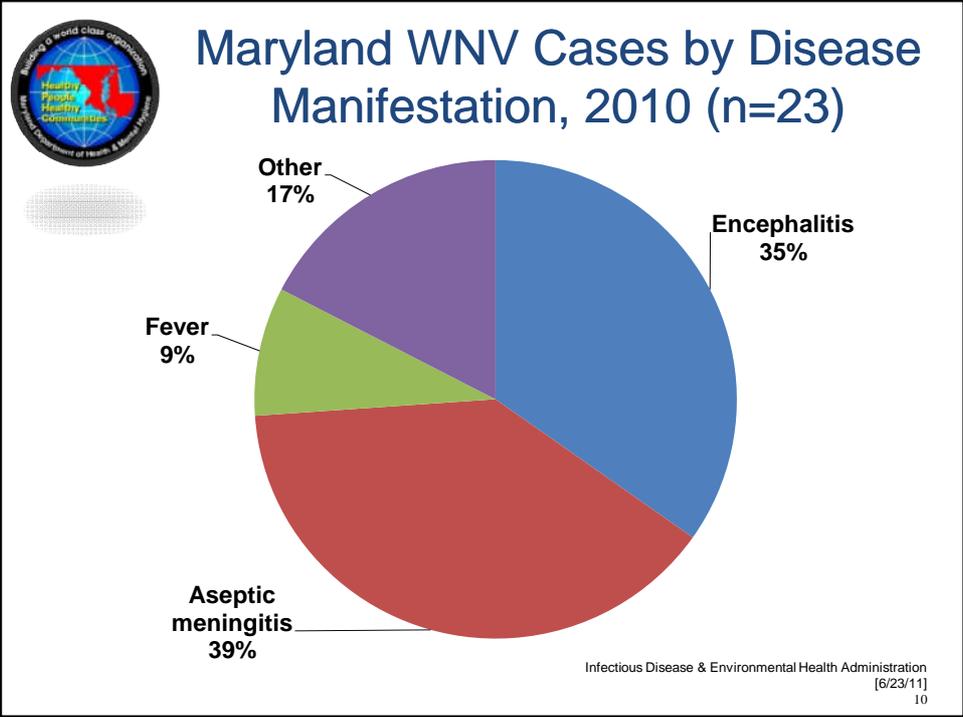
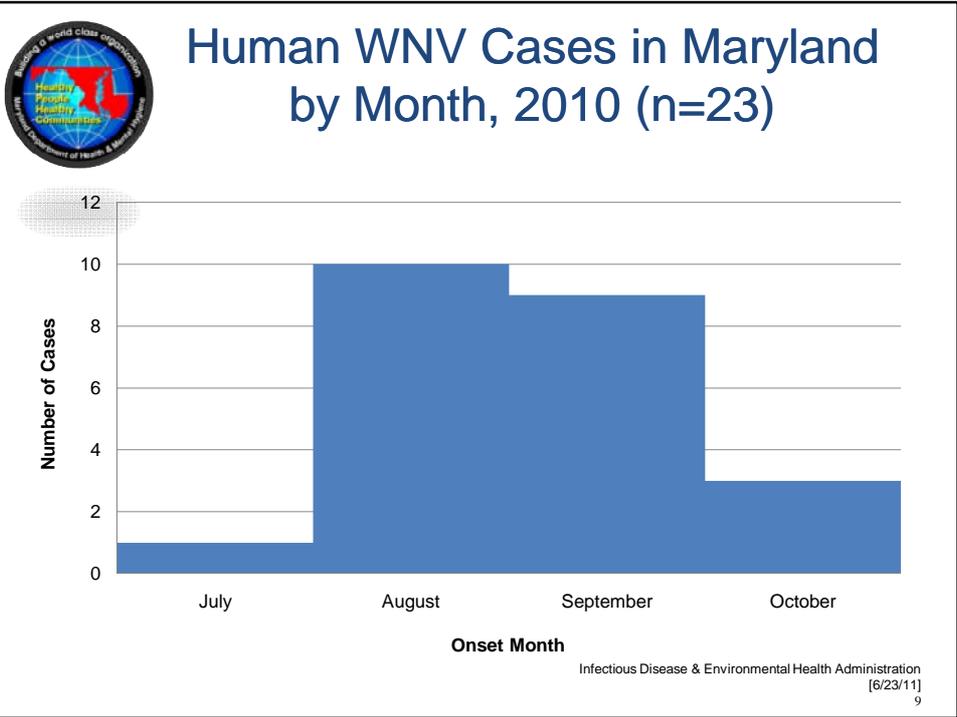
Illustration
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Descriptive Statistics on Human WNV Cases in Maryland, 2010 (n=23)

Case Characteristic	
Age	Median 62 years Range 19 – 92 years
Gender	15 male (65.2%) 8 female (34.8%)
Race	18 White (78.3%) 4 Black (17.4%) 1 Unknown (4.3%)
WNV Disease Onset Dates	July 13 – October 11

Illustration
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Maryland Mosquito Surveillance, 2010

- 2,219 mosquito pools (23,043 mosquitoes) submitted for arboviral testing
- 8 mosquito pools positive
 - Anne Arundel County (n=4)
 - Baltimore County (n=1)
 - Montgomery County (n=3)
- Species positive: *Culex salinarius*; *Culex pipiens*
- No Eastern equine encephalitis detected
- Mosquito populations at lowest levels in years, especially in coastal areas

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Maryland Equine Surveillance, 2010

- 1 horse in Frederick County with probable WNV infection tested at Pennsylvania Animal Diagnostic Laboratory System
 - 3-year old female Standardbred filly
 - Onset date: August 31, 2010
 - Clinical signs: Muscle fasciculations; abnormal gait
 - Rapidly deteriorated to recumbency
 - Euthanized 9/4/10
 - Previously vaccinated against rabies Feb 2010
 - CSF positive for WNV via IgM capture ELISA
 - Consistent with CDC case definition for probable equine case

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2010 Summary

- Like Maryland, other Northeast states experienced similar increases in human WNV disease activity in 2010
- Two human cases of LaCrosse encephalitis virus reported in Maryland
 - Garrett and Harford counties

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Maryland 2011 Arboviral Season

- Dates: July 1 – October 31, 2011
- Will include human, equine, mosquito, and wildlife surveillance and mosquito control
- Collaboration of three state agencies:
 - DHMH
 - MDA
 - DNR
- Other contributor(s): Department of Defense (DoD), Maryland Zoo in Baltimore
- Letter being sent to equine veterinarians reminding them of availability of equine arboviral testing and reporting of equine neurologic syndromes

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Future Directions

- DHMH will continue to work with state and federal partners to prevent and control arboviral disease activity in Maryland
- Maintain surveillance activities to detect WNV, Eastern equine encephalitis, and other arboviral diseases, like some of those previously found in Maryland:
 - Cache Valley virus
 - Jamestown Canyon virus

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