



West Nile Virus: Recognition, Prevention, and Control



Introduction

- Overview
- Virus Basics
- Recognizing Signs and Symptoms
- Virus Prevention
- What to do if you have Virus-Like Symptoms?



West Nile Virus Basics

- West Nile Virus is a potentially serious illness .
- Seasonal epidemic in North America that flares up in the summer and continues into the fall.
- It is thought that the virus is spread by mosquitoes which contract the West Nile from infected birds.
- According to the Center for Disease Control, only 1% of people bitten by West Nile-infected mosquitoes become seriously ill.
- 2012 West Nile Virus Update
 - 1118 cases reported in the US as of August 21, 2012
 - 537 cases in Texas with 19 deaths as of August 21, 2012. Below is a link of the current CDC numbers by state:
 - http://www.cdc.gov/ncidod/dvbid/westnile/surv&controlCaseCount12_detailed.htm
 - Here is a link of the current numbers for Texas based on counties:
<http://www.dshs.state.tx.us/news/updates.shtm>

Spread of Virus

- Infected Mosquitoes
- Transfusions, Transplants, Mother-to-Child
- Not through Touching





West Nile Virus

Serious Symptoms

- *Fever (usually higher than 100 F)*
- *Headache*
- *Neck Stiffness*
- *Stupor*
- *Disorientation*
- *Coma*
- *Tremors*
- *Convulsions*
- *Muscle Weakness*
- *Vision Loss*
- *Numbness*
- *Paralysis*



UT HEALTH SCIENCE CENTER™

ENVIRONMENTAL HEALTH & SAFETY



West Nile Virus

Milder Symptoms

- *Fever (usually higher than 100 F)*
- *Headache*
- *Body Aches*
- *Nausea*
- *Vomiting*
- *Swollen Lymph Glands*
- *Skin Rash (chest, stomach, back)*



West Nile Virus Symptoms

- 80% of people (about 4 out of 5) who are infected do not show symptoms
- Typical development of symptoms is between 3 and 14 days after bitten by mosquito



UT HEALTH SCIENCE CENTER™

ENVIRONMENTAL HEALTH & SAFETY



CDC Guidance for Prevention

- Don't handle any dead birds & contact your local health department for disposing of the bird
- Apply insect repellent to exposed skin preferably with more active ingredients as they last longer (more than 20% DEET)
- Spray clothing with repellents as mosquitoes may bite through thin clothing
- When weather permits, wear long-sleeved shirts and long pants whenever outdoors
- Place mosquito netting over infant carriers
- Consider staying indoors at dawn, dusk, and in the early morning which are all peak mosquito biting times
- Install or repair window and door screens so that mosquitoes cannot get indoors



UT HEALTH SCIENCE CENTER™

ENVIRONMENTAL HEALTH & SAFETY

Prevention and Control

- **No Vaccine is currently available**
- **Wide-Spread Pesticide Spraying for mosquito prevention and control**
- **Insect Repellent on clothes and skin when outside**
- **Eliminate standing water to prevent laying of mosquito eggs (Examples: pots, dog bowls, bird baths, buckets, trash-cans, and barrels)**





What to do if you have symptoms?

- If you become ill with unusually severe headaches or confusion, seek medical attention immediately.
- Severe West Nile Virus requires hospitalization.
- If pregnant or nursing, you are encouraged to talk to your doctor about your symptoms.



What is the University of Texas Health Science Center doing to help?

- Facilities Management is working to remove all standing water from the campus



What can you do to help?

- Education like this training module helps to reduce stress and uncertainty.
- Be a public health hero! Offer education and outreach to your own community. Knowledge is an invaluable tool.
- Virus control begins with the individual, so teach family members because they can make a difference!
- Visit the local, state, and federal public health websites:

<http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>



References

- The content of this training presentation was generally derived from the Centers for Disease Control & Prevention website on West Nile Virus, last accessed on August 23, 2012.
<http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>
- These recommendations may change in the future which could alter or negate local, state, or federal public health guidance. The University of Texas provides no explicit or implicit warranty on the accuracy of the information contained in this presentation due to the dynamic nature of virus.