

# West Nile Virus Newsletter

Zoonotic Disease Program, Washington State Department of Health

October 5, 2006

Volume 4, Issue 11

## Purpose

To keep our partners and other interested entities informed about West Nile virus (WNV)

## In This Issue

Pierce County woman is state's 2<sup>nd</sup> WNV case

Comparing human health risk of WNV vs. adulticiding

Ask Jay answers what journals the Zoonotic Disease Program has

WHO approves indoor use of DDT for malaria control

Journal articles from CDC's *Emerging Infectious Diseases*

National, regional, and state surveillance update

## Previous Issue

Pierce County man is state's first confirmed WNV case

WNV found in three more Yakima horses

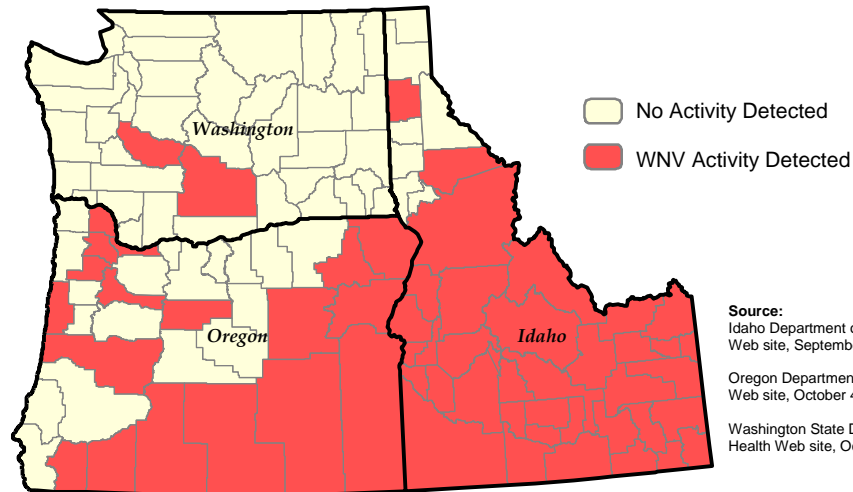
Dead bird from Yakima County tests positive

Residents of Southwest WA encourage to prevent mosquito bites

Mosquito group wants wider net

View the [September 21, 2006](#) WNV Newsletter

## West Nile virus activity in the northwest, 2006



### WNV positive in the northwest

[Washington](#): 2 humans, 5 horses, 1 bird

[Idaho](#): 839 humans, 321 horses, 117 birds, mosquito pools detected in 6 counties

[Oregon](#): 59 humans, 31 horses, 19 birds, 24 mosquito pools

## Pierce County woman is state's second WNV case

*Washington Department of Health, News Release, September 25, 2006*

OLYMPIA - A Pierce County woman in her forties was confirmed today as the state's second case of a person infected with West Nile virus. Blood tests at the state Public Health Laboratories were positive, so samples were sent to the Centers for Disease Control and Prevention (CDC).

The woman is the wife of the man who was listed as the state's first case September 13. The couple did not travel out of the state during the time they were likely bitten by an infected mosquito. The disease is not spread person to person so they are not a threat to public health.

## Comparing human health risk of WNV vs. adulticiding

*Environmental Health Perspectives, Correspondence, Volume 14, Number 9, September 2006*

In March 2006 the journal *Environmental Health Perspectives* published a risk comparison by Peterson et al. which argued that "human-health risks from residential exposure to mosquito insecticides are low and are not likely to exceed levels of concern. Further, our results indicate that, based on human-health criteria, the risks from WNV exceed the risks from exposure to mosquito insecticides".

## Web Resources

Washington State  
Department of Health  
[www.doh.wa.gov/wnv](http://www.doh.wa.gov/wnv)

Centers for Disease  
Control and Prevention  
[www.cdc.gov/ncidod/dvbid/westnile](http://www.cdc.gov/ncidod/dvbid/westnile)

US Geological Survey  
ArboNET maps  
[diseasemaps.usgs.gov](http://diseasemaps.usgs.gov)

Washington State  
University Cooperative  
Extension  
[www.wnv.wsu.edu](http://www.wnv.wsu.edu)

Washington State  
Department of  
Agriculture  
[www.agr.wa.gov/FoodAnimal/AnimalHealth/Diseases/WestNileVirus/default.htm](http://www.agr.wa.gov/FoodAnimal/AnimalHealth/Diseases/WestNileVirus/default.htm)

## Northwest Links

Idaho Department of  
Health & Welfare  
[www.westnile.idaho.gov](http://www.westnile.idaho.gov)

Oregon Department of  
Human Services  
<http://egov.oregon.gov/DHS/ph/acd/diseases/wnile/survey.shtml>

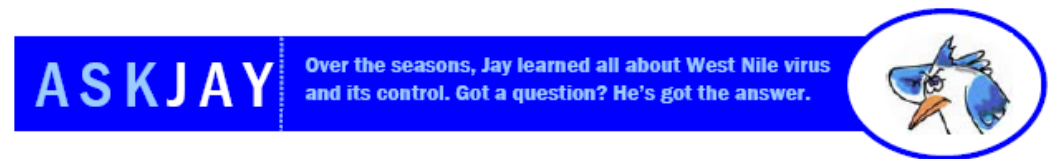
British Columbia Center  
for Disease Control  
<http://www.bccdc.org/content.php?item=183>

## Subscribe, Submit Articles, Suggestions for the Newsletter

Contact Ben Hamilton  
[benjamin.hamilton@doh.wa.gov](mailto:benjamin.hamilton@doh.wa.gov)

A critique of the methodology used in this study, written by a team with the Canadian Department of National Defense, is published in the correspondence section of the September 2006 issue, with a response from Peterson et al. These letters are at <http://www.ehponline.org/docs/2006/9180/letter.html>.

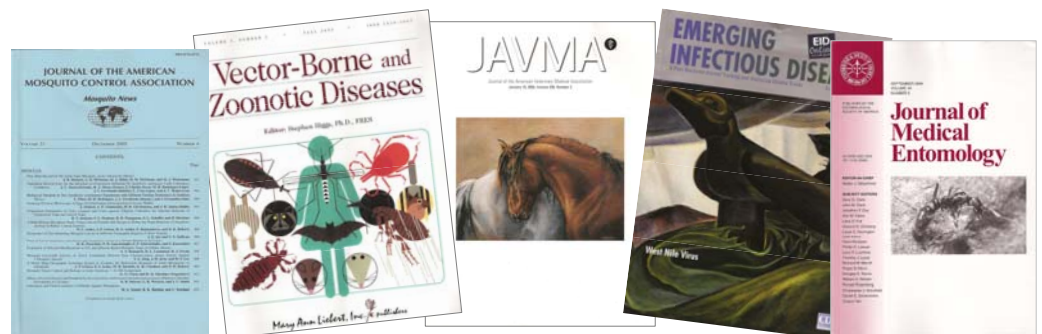
This original research article was in the November 30, 2005 *WNV Newsletter* and is available at <http://www.ehponline.org/docs/2005/8667/abstract.html>.



**Question:** What scientific journals does your program have access to that relate to West Nile virus and other zoonotic diseases?

**Jay:** We currently have subscriptions to several peer-reviewed journals that cover zoonotic disease topics. Here's a brief run down:

- [Journal of Medical Entomology](#) is published bimonthly by the Entomological Society of America and is available through subscription. Many of the articles are offered for free in PDF format on their Web site.
- [Journal of the American Mosquito Control Association](#) is published quarterly by the American Mosquito Control Association and is available through membership or subscription.
- [Vector-Borne and Zoonotic Diseases](#) is published quarterly by Mary Ann Liebert Inc. and is available through subscription.
- [Emerging Infectious Diseases](#) is published monthly by the National Center for Infectious Diseases, Centers for Disease Control and Prevention. Online articles or print subscriptions are available for free.
- [Journal of the American Veterinary Medical Association](#) is published semimonthly and is obtained through our Veterinarian's membership to the American Veterinary Medical Association.



Some journals have strict copyright protections. If there's a specific article that interests you, contact the Zoonotic Disease Program and we'll look into how it can be shared with you.

Ask Jay a West Nile virus related question at [zd@doh.wa.gov](mailto:zd@doh.wa.gov).

## National WNV Statistics for 2006

As of October 3<sup>rd</sup> forty-eight states + DC and NYC have reported some type of West Nile virus activity to the CDC.

### Humans

Total human case-patients: **3011**

Patients with meningitis and/or encephalitis: **1069**

Total human deaths: **94**

Presumptively viremic blood donors: **243**

### Avian

Total dead bird cases reported positive: **3349**

Number of corvids reported positive: **2720**

States/districts reporting positive dead birds: **42**

### Veterinary

Total number of veterinary cases (3 other species, remainder are equines): **812**

States/districts reporting positive veterinary cases: **35**

### Mosquito Pools

Total number of positive mosquito pools: **9749**

States reporting positive mosquito pools: **40**

Most frequent mosquito pool species reported positive:

1. *Culex tarsalis*
2. *Culex pipiens-restuans* (mixed)
3. *Culex pipiens*

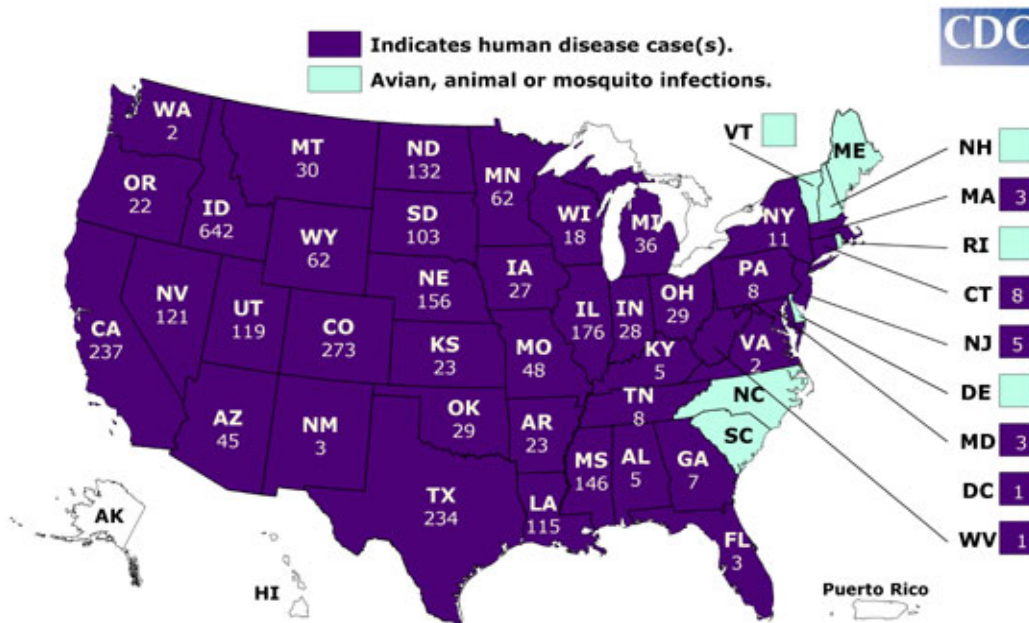
### Sentinels

Total number of sentinel infections reported positive: **680**

States/districts reporting positive sentinels: **11**

## West Nile virus activity in the United States, 2006

Surveillance findings reported to CDC, October 3, 2006



National maps and data available at

<http://www.cdc.gov/ncidod/dvbid/westnile/surv&control.htm>.

## WHO approves indoor use of DDT for malaria control

World Health Organization, News Release, September 15, 2006

WASHINGTON, D.C. - Nearly thirty years after phasing out the widespread use of indoor spraying with DDT and other insecticides to control malaria, the World Health Organization (WHO) today announced that this intervention will once again play a major role in its efforts to fight the disease. WHO is now recommending the use of indoor residual spraying (IRS) not only in epidemic areas but also in areas with constant and high malaria transmission, including throughout Africa.

“The scientific and programmatic evidence clearly supports this reassessment,” said Dr Anarfi Asamoah-Baah, WHO Assistant Director-General for HIV/AIDS, TB and Malaria. “Indoor residual spraying is useful to quickly reduce the number of infections caused by malaria-carrying mosquitoes. IRS has proven to be just as cost effective as other malaria prevention measures, and DDT presents no health risk when used properly.”

WHO actively promoted indoor residual spraying for malaria control until the early 1980s when increased health and environmental concerns surrounding DDT caused the organization to stop promoting its use and to focus instead on other means of prevention. Extensive research and testing has since demonstrated that well-managed indoor residual spraying programmes using DDT pose no harm to wildlife or to humans.

Read the complete World Health Organization news release at

<http://www.who.int/mediacentre/news/releases/2006/pr50/en/index.html>.

**DOH WNV  
Contacts**

Toll Free Info Line  
**1-866-78VIRUS**

**Publication Requests**

Cyndi Free  
360-236-3384  
[cyndi.free@doh.wa.gov](mailto:cyndi.free@doh.wa.gov)

**Mosquito and Bird  
Surveillance**

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**Horse Surveillance**

Ron Wohrle  
360-236-3369  
[ron.wohrle@doh.wa.gov](mailto:ron.wohrle@doh.wa.gov)

**Aquatic Mosquito  
Control NPDES Permit**

Ben Hamilton  
360-236-3364  
[benjamin.hamilton@doh.wa.gov](mailto:benjamin.hamilton@doh.wa.gov)

**WNV in Humans**

Local Health Jurisdiction  
or  
DOH Communicable  
Disease Epidemiology  
206-418-5500 or  
877-539-4344

**News Releases/ Media  
Response Assistance**

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**Journal articles**

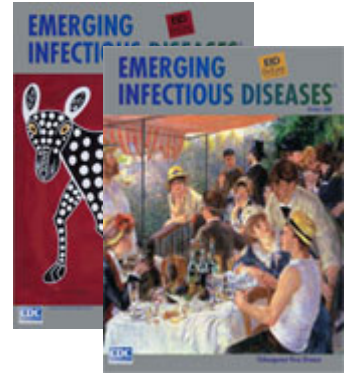
*CDC, Emerging Infectious Diseases, Volume 12, Number 9&10 –  
September & October Issues*

**West Nile Virus Infection in Commercial Waterfowl  
Operation, Wisconsin, J.K. Meece et al.**

<http://www.cdc.gov/ncidod/eid/vol12no09/05-1648.htm>

**West Nile Virus Isolation from Equines in  
Argentina, 2006, M.A. Morales et al.**

<http://www.cdc.gov/ncidod/eid/vol12no10/06-0852.htm>



**Washington environmental surveillance summary, 2006**

*Reported to DOH as of October 4, 2006*

County	Horses*		Birds**		Sentinel Flocks***		Mosquito Pools****	
	Tested	Positive	Tested	Positive	Tested	Positive	Tested	Positive
Adams	0	0	1	0	0	0	0	0
Asotin	0	0	0	0	0	0	0	0
Benton	2	0	3	0	364	0	309	0
Chelan	0	0	6	0	0	0	7	0
Clallam	0	0	0	0	0	0	0	0
Clark	2	0	1	0	0	0	32	0
Columbia	0	0	1	0	0	0	0	0
Cowlitz	0	0	14	0	0	0	94	0
Douglas	0	0	0	0	0	0	0	0
Ferry	0	0	1	0	0	0	0	0
Franklin	1	0	2	0	0	0	115	0
Garfield	0	0	0	0	0	0	0	0
Grant	0	0	1	0	0	0	0	0
Grays Harbor	0	0	6	0	0	0	2	0
Island	0	0	14	0	0	0	0	0
Jefferson	0	0	8	0	0	0	0	0
King	2	0	56	0	0	0	16	0
Kitsap	0	0	0	0	0	0	0	0
Kittitas	1	0	1	0	0	0	0	0
Klickitat	1	0	2	0	0	0	0	0
Lewis	1	0	7	0	0	0	0	0
Lincoln	0	0	1	0	0	0	0	0
Mason	0	0	9	0	0	0	0	0
Okanogan	1	0	0	0	0	0	0	0
Pacific	0	0	0	0	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0
Pierce	1	0	70	0	0	0	33	0
San Juan	1	0	0	0	0	0	0	0
Skagit	0	0	8	0	0	0	0	0
Skamania	0	0	0	0	0	0	0	0
Snohomish	2	0	53	0	0	0	78	0
Spokane	7	0	12	0	0	0	0	0
Stevens	0	0	4	0	0	0	0	0
Thurston	0	0	22	0	0	0	0	0
Wahkiakum	0	0	0	0	0	0	0	0
Walla Walla	1	0	5	0	0	0	12	0
Whatcom	1	0	10	0	0	0	2	0
Whitman	1	0	6	0	0	0	0	0
Yakima	7	5	11	1	77	0	411	0
<b>Totals</b>	<b>32</b>	<b>5</b>	<b>335</b>	<b>1</b>	<b>441</b>	<b>0</b>	<b>1111</b>	<b>0</b>

\* County information was not available for 4 horses that tested negative. WADDL Report: September 26, 2006.

\*\*A total of 340 birds have been tested for West Nile virus; 4 specimens unsuitable for testing, 1 specimen was from out-of-state. WADDL Report: September 29, 2006.

\*\*\* Sentinel Chicken Sera tested by Benton MCD Report: September 28, 2006.

\*\*\*\* Pools tested by USACHPPM-West Report: September 29, 2006, Benton MCD Report: September 28, 2006, Franklin County MCD Report September 12, 2006, Clark County MCD August 22, 2006, Cowlitz County MCD August 28, 2006, and Columbia MCD September 12, 2006.

View the WNV Avian Mortality Report at

<http://www.doh.wa.gov/ehp/ts/Zoo/WNV/Newsletters/dbreport/dbreport.pdf>.