



United States Army Public Health Command  
**Army Vector-borne Disease Report**

19 September 2013

Data are preliminary and subject to change

- **West Nile virus:** CDC reports 890 human cases including 33 deaths for calendar year 2013; Army reports one confirmed case, none resulting in death.
- **WNV mosquito pools:** PHCR-West reported its first three positive mosquito pools, all at Ft. Bliss; PHCR-North reported six new positive pools; PHCR-South reported three new positive pools.
- **Tick-borne illness prevention:** Prompt tick removal is required to limit risk of infection with tick-borne illness.

**West Nile Virus (WNV)**

**United States**

- Since the last published report, 393 additional human WNV cases have been reported to the CDC, including 13 deaths.
- The majority of cases (54%, n=483) are classified as non-neuroinvasive.
- As of 17 September, 48 states (an increase of three since the last report) and Washington, D.C. report WNV activity of some type (infections in humans, birds, or mosquitoes).
- 45 states report WNV human infections. Maine, Rhode Island and West Virginia are the only contiguous states which have not reported any human WNV cases.

West Nile Virus Activity by State – United States, 2013 (as of September 17, 2013)



WNV Human Cases <sup>β</sup>		
Population	Reporting Period <sup>γ</sup>	Cum. 2013
United States	393	890
Army Cases <sup>±</sup> Confirmed and Probable		
Army AD <sup>‡</sup>	0	1
Army Non-AD <sup>†</sup>	0	0
WNV Human Deaths		
United States	13	33
Army	0	0

Sources: CDC and AIPH DRSI as of 17 September 2013.

Note: Reporting location may differ from exposure location.

<sup>β</sup> Confirmed and probable neuroinvasive and non- neuroinvasive cases.

<sup>γ</sup> Difference between last published report and this week's cumulative 2013 value.

<sup>±</sup> Only Army AD and beneficiaries who have a Reportable Medical Event generated on their behalf and whose case status is verified as confirmed/probable are included in this report.

<sup>‡</sup> Active duty, recruits, cadets.  
<sup>†</sup> Army-associated beneficiaries.

**Cases in Army AD and Other Beneficiaries**

- Since the last published report, no confirmed or probably WNV infection in Army AD was reported.
- Two individuals with WNV-related diagnoses have been identified in purchased care records; however, as the case statuses cannot be confirmed, they are excluded from this report.
- No WNV fatalities have been reported among Army beneficiaries this year.

**DoD Mosquito Surveillance from Army Laboratories**

- PHCR-North reports 6 positive pools in the greater DC metropolitan area.
- PHCR-South reports 3 positive pools from Fort Sill, OK.
- PHCR-West reports 3 positive pools from Fort Bliss, TX.

West Nile Virus Activity, by State and Army Public Health Command Region (PHCR), United States, 2013 (As of September 15, 2013)



Mosquito Pool Testing	PHC Region	Reporting Period <sup>γ</sup>	Year to Date 2013
		No. Positive (No. Tested)	No. Positive (No. Tested)
	North	6 (61)	33 (460)
	South	3 (122)	10 (1027)
	West	3 (17)	3 (129)

<sup>γ</sup> Absolute difference between last published report and this week's year to date number.

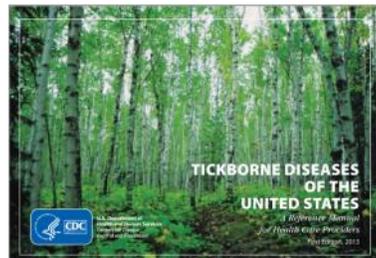
**Prevention and Control Activities**

- WNV activity, although rising, remains below levels reported this time period last year.
- Preventive Medicine personnel should continue to stress the importance of eliminating mosquito breeding sites (standing water) around homes and workplaces, and using personal protective measures (preferably those containing DEET).

**Tick-borne Diseases**

**Prevention**

- Tick-borne pathogens require the infected tick to be attached to the human host for specific amounts of time before transmission of infection can occur; required attachment time varies among pathogens.
- Lyme disease (LD), caused by *Borrelia burgdorferi*, requires attachment for 36-48 hours or more before transmission of disease occurs. Rocky Mountain Spotted Fever, caused by *Rickettsia rickettsii*, has an estimated required attachment time of 2-20 hours.
- When ticks are found attached to the skin, prompt removal is necessary to limit the risk of infection. This [CDC website](#) explains how to properly remove ticks. It also advises that "folklore remedies," such as applying heat or petroleum jelly to the attached tick, be avoided in order to ensure the tick is removed as quickly as possible.
- For more in depth information, please refer to the CDC guide, [Tickborne Diseases of the United States: A Reference Manual for Health Care Providers](#). This recently issued manual provides comprehensive information on several tick-borne illnesses endemic to the United States.
- The manual includes geographic distributions, incubation periods, signs and symptoms, laboratory diagnostics and treatment guidance for each disease.



**Lyme disease-specific Resources For Health Care Providers**

- [Two-tiered Testing Decision Tree](#) slide outlines diagnostic steps for LD.
- [Video guidance](#) for distinguishing LD and Southern Tick-Associated Rash Illness (STARI).
- Information for [veterinarians](#).

**For the General Public**

- [Lyme Disease: What you need to know](#) — an in-depth guide for the public.
- Communication Tool Kit: Includes prevention [fact sheets](#) in English and Spanish with specific guidance for pregnant women and parents.

**Resources:** CDC WNV • CDC Tickborne Diseases • Human Tick Test Program • USAPHC WNV Fact Sheet • Army Vector-borne Disease Reports • USAPHC

**Key:** CDC Centers for Disease Control and Prevention; DRSI Disease Reporting System Internet; Mosquito pool 1 to 50 mosquitoes; AD Active Duty

Contact us: [USAPHC Disease Epidemiology](#) or 410-417-2377

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

# West Nile Virus Activity by State – United States, 2013 (as of September 17, 2013)



\*\*WNV human disease cases or presumptive viremic blood donors. Presumptive viremic blood donors have a positive screening test which has not necessarily been confirmed.

†WNV veterinary disease cases, or infections in mosquitoes, birds, or sentinel animals.

## Data table:

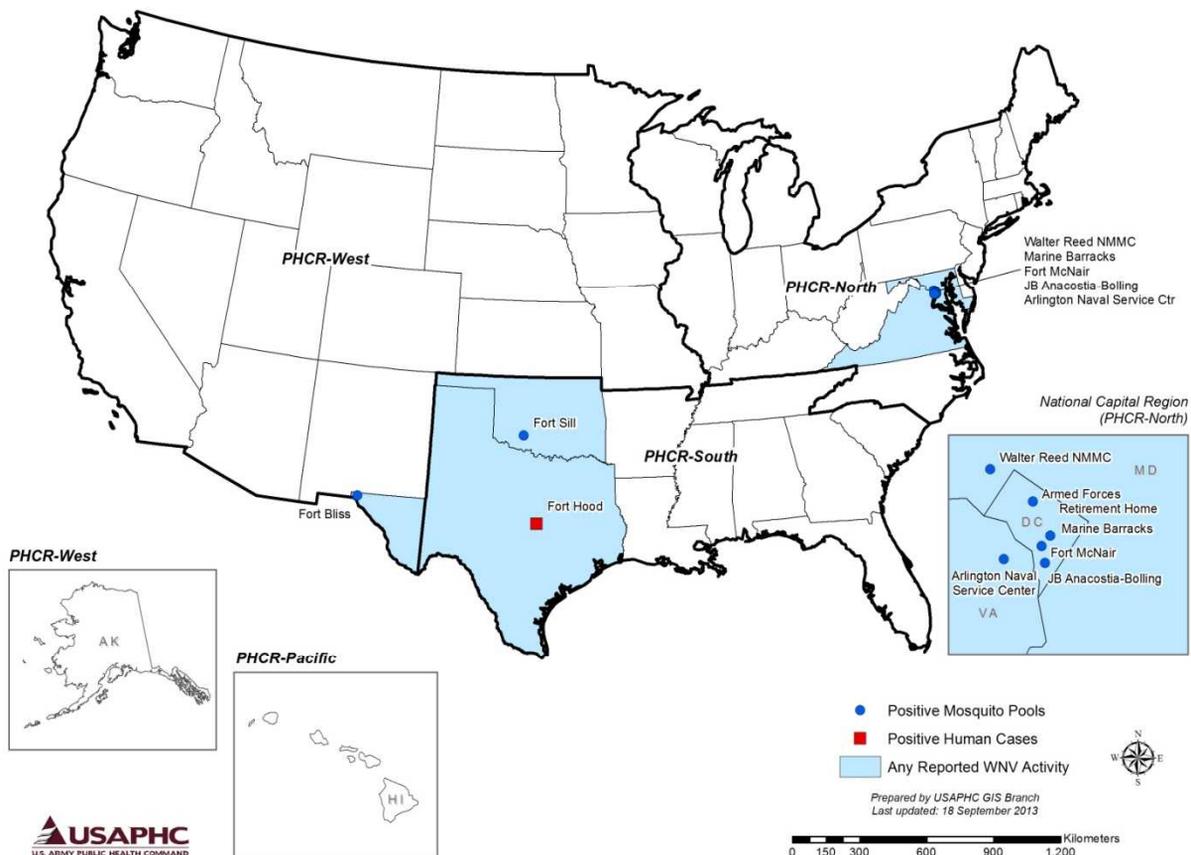
Non-human West Nile virus infections have been reported to CDC ArboNET from the following states: Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin and Wyoming.

Human West Nile virus infections have been reported to CDC ArboNET from the following states: Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, Wisconsin and Wyoming.

Source: <http://www.cdc.gov/westnile/statsMaps/preliminaryMapsData/activitystatedate.html>

# West Nile Virus Activity, by State and Army Public Health Command Region (PHCR), United States, 2013

As of September 19, 2013



Footnote: The map displays white areas that indicate no reported West Nile virus (WNV) activity, light blue areas represent any reported WNV activity\* within a state; dark blue circles represent WNV positive mosquito pools on military installations, and red squares represent the reporting location/installation of Army human cases (probable and/or confirmed). If West Nile virus infection is reported from any area of a state, that entire state is shaded light blue.

\*Includes WNV Army human disease cases (probable and/or confirmed) and infections in mosquito pools on military installations.

Prepared by: US Army Public Health Command Geographic Information Systems Branch.