



19 October 2016

Data are preliminary and subject to change

- **West Nile Virus:** As of 11 October, 1,264 human West Nile virus cases have been reported to the CDC.
- **Army-wide:** 71 pools of *Culex spp.* mosquitoes tested positive for WNV.

## West Nile Virus (WNV)

### United States

- From the beginning of the year through 11 October 2016, 1,264 human WNV cases have been reported to the CDC.
- 645 (51%) of the reported cases were classified as neuroinvasive (i.e., meningitis or encephalitis) and 619 (49%) were classified as non-neuroinvasive.
- From 1 January through 11 September, 46 states and the District of Columbia report WNV activity of some type (infections in humans, birds, or mosquitoes).



### Cases in Army AD and Other Beneficiaries

- No confirmed or probable WNV cases have been reported in Army AD and beneficiaries in 2016 (*updated from previous report*).

## DoD Army Laboratory Mosquito Surveillance

- As of 17 October, PHC-Central tested 13,986 mosquitoes (*Culex*, *Aedes*, *Culiseta*, and *Ochlerotatus spp.*) from 1,217 pools for WNV. 1,752 of these mosquitoes from 402 pools were also tested for CHIKV and ZIKV; 7 pools tested positive for WNV. The positive pools were collected from: Fort Bliss, TX; Fort Hood, TX; and Fort Altus, OK.
- As of 11 October, PHC-Pacific (JBLM) tested 3,095 *Aedes spp.* mosquitoes in 127 pools for CHIKV, Dengue (DENV), and ZIKV, and 101 *Aedes spp.* mosquitoes in 25 pools for DENV alone; all mosquitoes were negative for these diseases. 475 *Culex spp.* mosquitoes in 55 pools were tested for WNV; one pool tested positive for WNV. The positive pool was collected from Beale AFB, CA.
- As of 30 September, PHC-Atlantic tested 5,363 *Aedes* mosquito vector species for CHIKV and DENV. 5,348 of these mosquito vector species were also tested for ZIKV; all tested negative. 23,747 *Culex spp.* mosquitoes were tested for WNV; 63 pools tested positive for WNV. The positive pools were collected from: Anacostia Annex, DC; Fort McNair, DC; the Naval Observatory, DC; Bolling Air Force Base, DC; Walter Reed National Military Medical Center, MD; Fort Hamilton, NY; Fort Belvoir, VA; the Naval Support Center, MD; and Fort Meade, MD.



## DRSi Surveillance

- As of 15 October 2016, 106 cases of Lyme disease have been reported in Army AD beneficiaries compared to 80 during the same time period in 2015.

## Army Tick Testing

- As of 24 August, PHC-Atlantic tested 1,182 *Ixodes scapularis* ticks for *Borrelia* species pathogenic organisms. *B. burgdorferi* and *B. miyamotoi* were detected in 304 and 39 ticks respectively. 23 of the 39 ticks positive for *B. miyamotoi* were also co-infected with *B. burgdorferi* (*no update*).
- As of 21 September, PHC-Europe tested 86 ticks submitted from military treatment facilities for *Borrelia spp.*, *Anaplasma phagocytophilum*, and tick-borne encephalitis virus (TBEV); two were positive for *A. phagocytophilum*. 67 ticks submitted from veterinary treatment facilities were also tested for *Borrelia spp.*, *A. phagocytophilum*, and TBEV; two were positive for *A. phagocytophilum*.

- Of 178 *Ixodes* ticks tested by the Human Tick Test Program, 25.8% were positive for *B. burgdorferi*.

Human Tick Test Program	<i>A. phagocytophilum</i>	<i>B. microti</i>	<i>B. burgdorferi</i>	<i>E. chaffeensis</i>	<i>E. ewingii</i>	<i>E. muris-like</i>	<i>R. parkeri</i>	<i>R. rickettsii</i>	Panola mountain Ehrlichia
YTD No. Positive (YTD No. Tested)	4 (178)	5 (178)	46 (178)	23 (1766)	20 (1766)	0 (178)	1 (5)	0 (647)	29 (1766)

Note: CONUS data only.

\*Data is YTD 2016

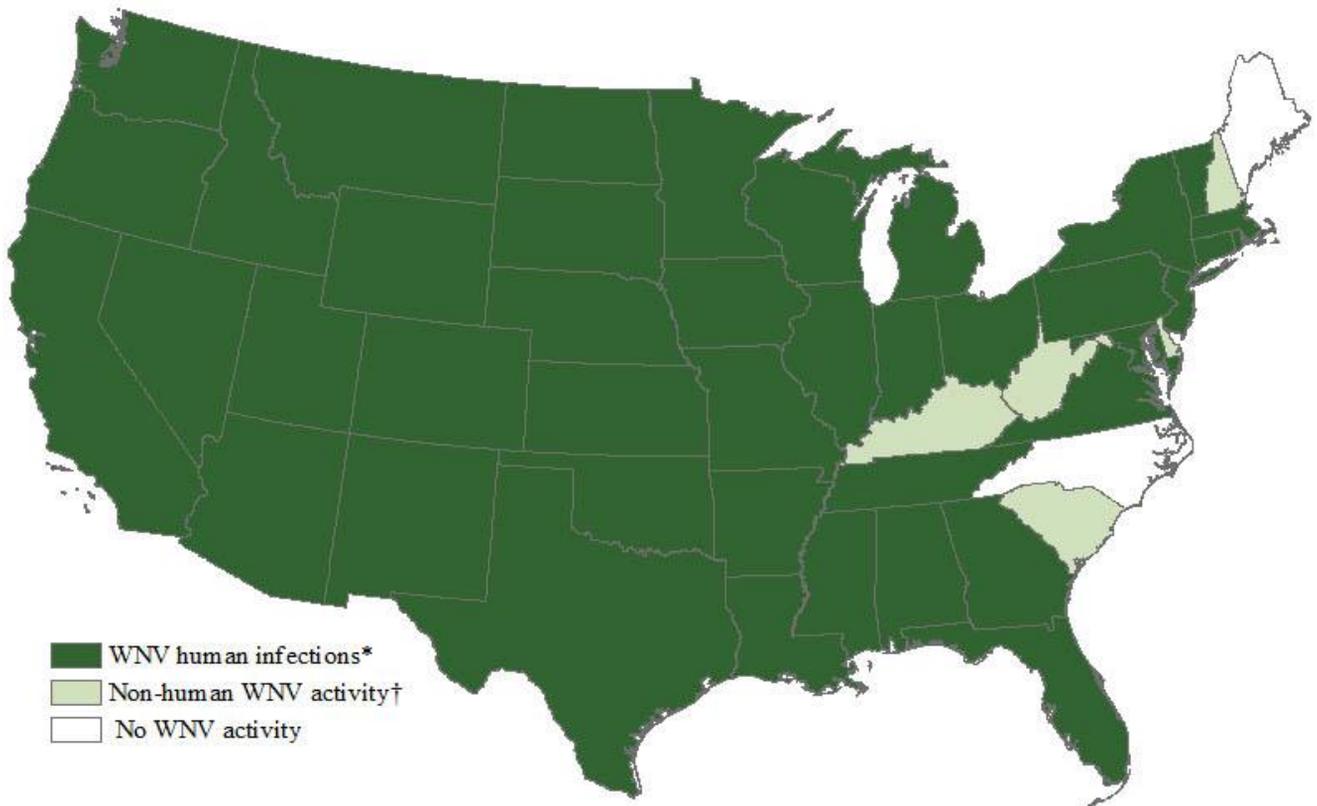
**Resources:** CDC West Nile Virus • CDC Lyme Disease • APHC Zika Virus • Permethrin Treated Uniforms • Army Vector-borne Disease Reports • APHC

**Key:** CDC Centers for Disease Control and Prevention; DRSi Disease Reporting System Internet; AD Active Duty

Contact us: APHC Disease Epidemiology or 410-417-2377

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# West Nile Virus Activity by State – United States, 2016 (as of October 11, 2016)



\*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:

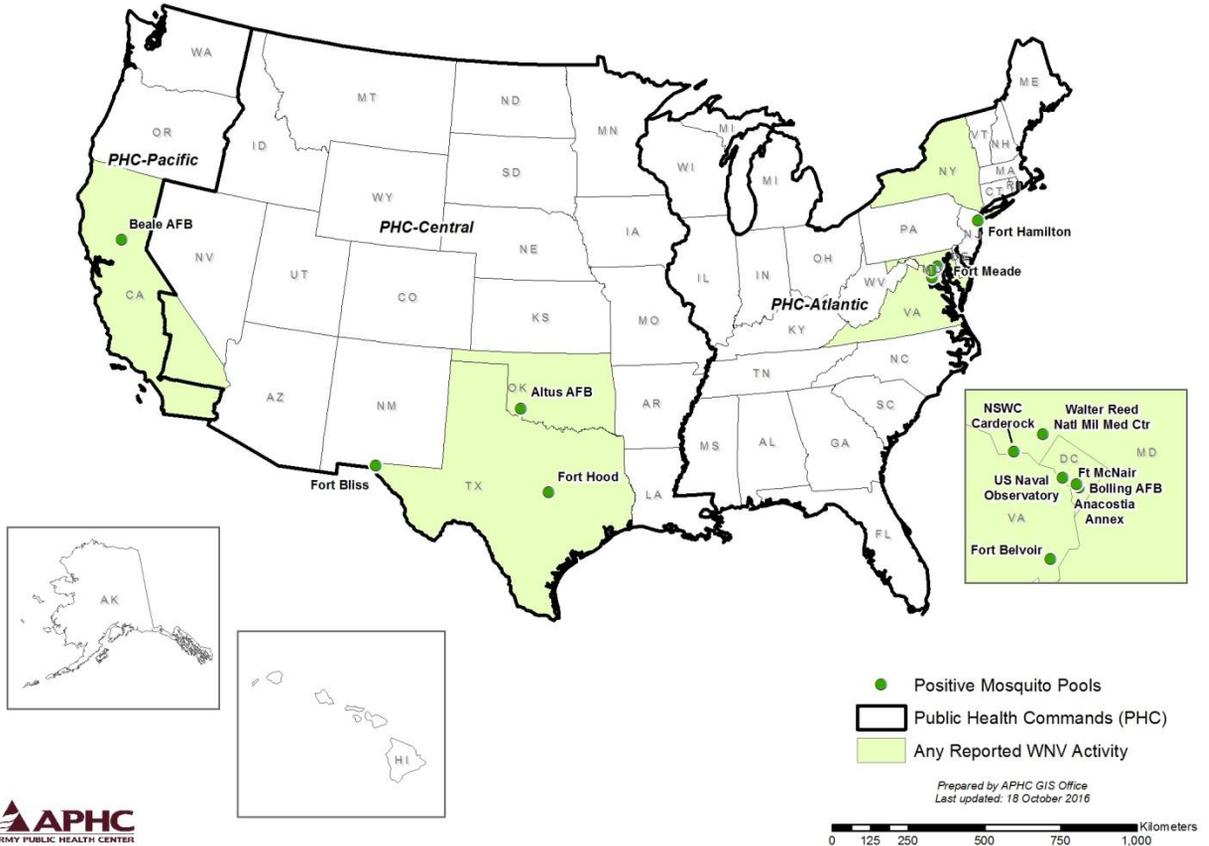
WNV infections in **mosquitoes, birds, sentinel animals, or veterinary animals** have been reported to CDC ArboNET from the following states: Arizona, California, Colorado, Connecticut, Delaware, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

West Nile virus infections in **humans** have been reported to CDC ArboNET from the following states: Alabama, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, 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 (PHC), United States, 2016

As of October 17, 2016



Footnote: The map displays white areas that indicate no reported West Nile virus (WNV) activity. Light green areas represent any reported WNV activity\* within a state and dark green circles represent WNV positive mosquito pools on military installations. If West Nile virus infection is reported from any area of a state, that entire state is shaded light green.

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

Prepared by: Army Public Health Center (Provisional) Geographic Information Systems Branch.