



Army Public Health Center
**Army Vector-borne
 Disease Report**

8 July 2016

Data are preliminary and subject to change

- **West Nile Virus:** 20 neuroinvasive cases have been reported by the CDC in 2016, less than half the number of cases (51) reported by the same time of year in 2015. No confirmed or probable cases have been reported in Army AD Service Members and beneficiaries.
- **PHC-Atlantic:** 565 mosquitoes were tested for chikungunya, dengue, and Zika virus; none were positive for any of these pathogens.

West Nile Virus (WNV)

United States

- From the beginning of the year through 1 July 2016, 20 human WNV cases have been reported to the CDC. No fatal cases were reported. During the same time period in 2015, 24 cases were reported.
- All of the reported cases were classified as neuroinvasive (i.e., meningitis or encephalitis).

Cases in Army AD and Other Beneficiaries

- No confirmed or probable WNV cases have been reported in Army AD and beneficiaries in 2016.

Zika Virus (ZIKV) Update

- From January 1, 2015 through June 8, 2016, 935 ZIKV cases have been reported in the U.S., 934 were travel-associated and one was laboratory acquired. 1,993 locally acquired and 6 travel-associated cases were reported in Puerto Rico, U.S. Virgin Islands, and American Samoa.

WNV Human Cases ^β		
Population	Cum. 2016 [^]	Cum. 2015
United States	20	24
Army Cases [±] Confirmed and Probable		
Army AD [‡]	0	0
Army Non-AD [†]	0	0

Sources: CDC 25 June, DRSI 25 June 2016
 Note: Reporting location may differ from exposure location.
^β Confirmed and probable neuroinvasive and non-neuroinvasive cases.
[^] Difference between last published and this week's cumulative 2015 value.
[±] Only cases whose case status is verified as confirmed/probable.
[‡] Active duty, recruits, cadets.

DoD Army Laboratory Mosquito Surveillance

- PHC-Pacific JBLM tested 1,804 *Aedes spp.* mosquitoes from 83 pools for CHIKV, DENV, and ZIKV and another 101 *Aedes* mosquitoes from 25 pools were tested for DENV alone; all were negative. 21 *Culex tarsalis* mosquitoes from two pools were tested for WNV; all were negative.
- PHC-Atlantic tested 567 *Aedes spp.* mosquitoes for ZIKV, CHIKV, and DENV; all were negative. 1,062 *Culex spp.* mosquitoes were tested for WNV; all were negative.

DRSi Surveillance

- 38 cases of Lyme disease have been reported in Army AD and beneficiaries in 2016, compared to 27 cases during the same time period in 2015.
- Of the 38 cases, 19 (50%) were AD.

Army Tick Testing

- PHC-Atlantic tested 503 *Ixodes scapularis* ticks for *Borrelia burgdorferi*, the pathogen that causes Lyme disease, and *B. miyamotoi*, which produces symptoms typical of tick-borne relapsing fever. 37 ticks tested positive for *B. burgdorferi* and 10 tested positive for *B. miyamotoi*. The positive ticks were collected from Fort Drum, NY, Blossom Point, MD, Fort Knox, KY, and Adelphi Laboratories, MD.
- Of 156 *Ixodes* ticks tested by the Human Tick Test Program, 25% (n=39) were positive for the Lyme disease pathogen *B. burgdorferi*.

Human Tick Test Program	A. <i>phagocytophilum</i>	B. <i>microti</i>	B. <i>burgdorferi</i>	E. <i>chaffeensis</i>	E. <i>ewingii</i>	E. <i>muris-like</i>	R. <i>parkeri</i>	R. <i>rickettsii</i>
YTD No. Positive (YTD No. Tested)	4(156)	3(156)	39(156)	7(548)	7(548)	0(156)	0(0)	0(205)

Note: CONUS data only.

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

Lyme Disease Cases		
Population	Cum. 2016	Cum. 2015 [^]
United States ^β	7,483	11,064
Army Cases [±] Confirmed and Probable		
Army AD [‡]	19	8
Army Non-AD [†]	19	19
Regional Case Distribution		
PHC-Atlantic	20	22
PHC-Central	16	1
PHC-Pacific	2	2
PHC-Europe	5	2
Other/Unknown	0	0

Sources: CDC and AIPH DRSI.

Note: Reporting location may differ from exposure location.

^β Provisional cases through 2 July

[±] Cases reported through 2 July

[‡] Active duty, recruits, cadets.

[†] Army-associated beneficiaries.

[^] Cumulative through 4 July 2015