



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

24 June 2016

Data are preliminary and subject to change

- **Zika Virus:** 755 travel-associated cases have been reported to the CDC in the United States; 7 confirmed and probable cases have been reported in Army beneficiaries.
- **PHC-Pacific (JBLM):** 13 ticks were tested for *Rickettsia rickettsii*; none tested positive.

West Nile Virus (WNV)

United States

- From the beginning of the year through 11 June 2016, eight 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.

Chikungunya (CHIKV)

- Chikungunya is a mosquito-borne viral disease and was diagnosed for the first time in the Americas on islands in the Caribbean in late 2013. The first locally-acquired case of chikungunya in Texas (Cameron County) was announced on 31 May 2016. The closest Army installation is Corpus Christi Army Depot, which is approximately 150 miles from Cameron County. Current mosquito surveillance efforts for Zika virus in the Army will suffice for chikungunya surveillance.

Zika Virus (ZIKV) Update

- From January 1, 2015 through June 15, 2016, 755 ZIKV cases have been reported in the U.S., all travel-associated. 1,436 locally acquired and 4 travel-associated cases were reported in Puerto Rico, U.S. Virgin Islands, and American Samoa.
- To date, seven confirmed and probable cases of ZIKV have been reported in Army beneficiaries: 5 AD and 2 non-AD cases.

WNV Human Cases ^β		
Population	Cum. 2016	Cum. 2015 [^]
United States	8	24
Army Cases [±] Confirmed and Probable		
Army AD [‡]	0	0
Army Non-AD [†]	0	0

Sources: CDC 11 June, DRSI 11 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 2016 value.
[±] Only cases whose case status is verified as confirmed/probable.
[‡] Active duty, recruits, cadets.
[^] Cumulative through 13 June 2016.

DoD Army Laboratory Mosquito Surveillance

- PHC-Central tested 2,608 mosquitoes (*Culex*, *Aedes*, *Culiseta*, and *Ochlerotatus spp.*) from 198 pools for WNV. 74 of these mosquitoes from 27 pools were also tested for CHIKV and ZIKV; none were positive for any of these pathogens.
- PHC-Pacific (JBLM) tested 1,183 *Aedes spp.* mosquitoes in 60 pools for CHIKV, dengue (DENV), and ZIKV. 101 *Aedes spp.* mosquitoes in 25 pools were tested for DENV alone; all were negative for these pathogens.
- PHC-Atlantic tested 433 *Aedes* mosquito vector species for CHIKV, DENV, and ZIKV; and 336 *Culex spp.* mosquitoes for WNV. All were negative.

DRSi Surveillance

- 2 cases of Rocky Mountain Spotted Fever (RMSF) have been reported in Army AD beneficiaries in 2016, compared to 4 cases during the same time period in 2015.

Army Tick Testing

- PHC-Atlantic tested 20 *Rhipicephalus turanicus* ticks for *Rickettsia spp.* Four ticks (20%) tested positive for *Rickettsia spp.*
- PHC-Pacific (JBLM) tested 13 *Dermacentor variabilis* ticks from 5 pools for *Rickettsia rickettsii*; none tested positive.
- Of 123 *Ixodes* ticks tested by the Human Tick Test Program, 24% (n=29) were positive for the Lyme disease pathogen *B. burgdorferi*.

Rocky Mountain Spotted Fever Cases		
Population	Cum. 2016	Cum. 2015 [^]
United States ^β	693	991
Army Cases Confirmed and Probable		
Army AD [‡]	0	2
Army Non-AD [†]	2	2
Regional Distribution		
PHC-Atlantic	2	1
PHC-Central	0	2
PHC-Pacific	0	1
PHC-Europe	0	0
Other/Unknown	0	0

Sources: CDC and DRSIs as of 11 June 2016.
 Note: Reporting location may differ from exposure location. CDC data is for Spotted Fever Rickettsiosis (including RMSF).
^β Provisional confirmed and probable cases.
[‡] Active duty, recruits, cadets.
[†] Army-associated beneficiaries.
[^] Cumulative through 13 June 2015

Human Tick Test Program	A. phagocytophilum	B. microti	B. burgdorferi	E. chaffeensis	E. ewingii	E. muris-like	R. parkeri	R. rickettsii
YTD No. Positive (YTD No. Tested)	4 (123)	0(123)	29(123)	5(377)	6(377)	0(123)	0(0)	0(99)

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

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