

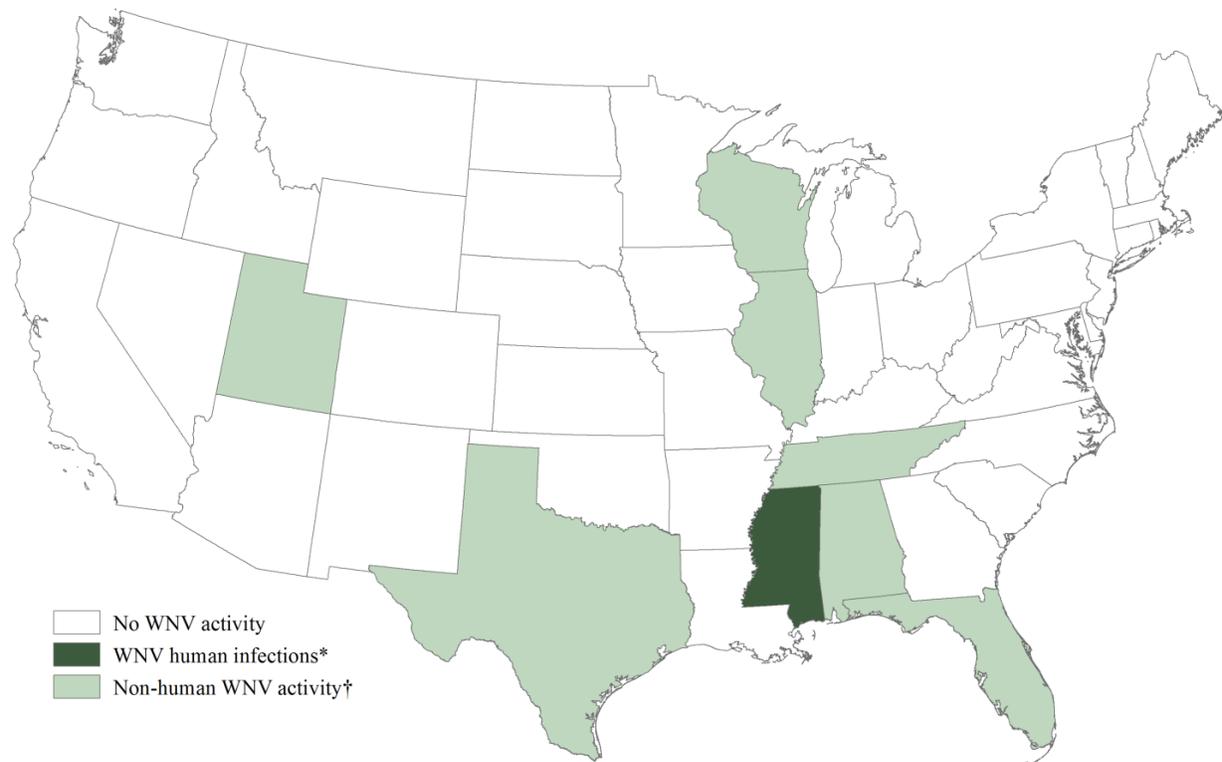
West Nile virus and other arboviral activity -- United States, 2014
Provisional data reported to ArboNET
Tuesday, June 10, 2014

This update from the CDC Arboviral Disease Branch includes provisional data reported to ArboNET for **January 1 – June 10, 2014** for nationally notifiable arboviruses other than dengue. Additional resources for ArboNET and arboviral diseases are provided on page 5.

West Nile virus (WNV) activity in 2014

As of June 10th, 14 counties from eight states have reported WNV activity to ArboNET for 2014, including one state with reported WNV human infections (i.e., disease cases or viremic blood donors) and seven additional states with reported WNV activity in non-human species only (i.e., veterinary cases, mosquito pools, dead birds, or sentinel animals) [Figure 1].

Figure 1. West Nile virus (WNV) activity reported to ArboNET, by state — United States, 2014 (as of June 10, 2014)



*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

Reported WNV disease cases

To date, two human WNV disease cases have been reported from Mississippi. Of these, 1 (50%) was classified as neuroinvasive disease (such as meningitis or encephalitis) and 1 (50%) was classified as non-neuroinvasive disease [Table 1 and Figure 2].

Presumptive viremic donors (PVDs)

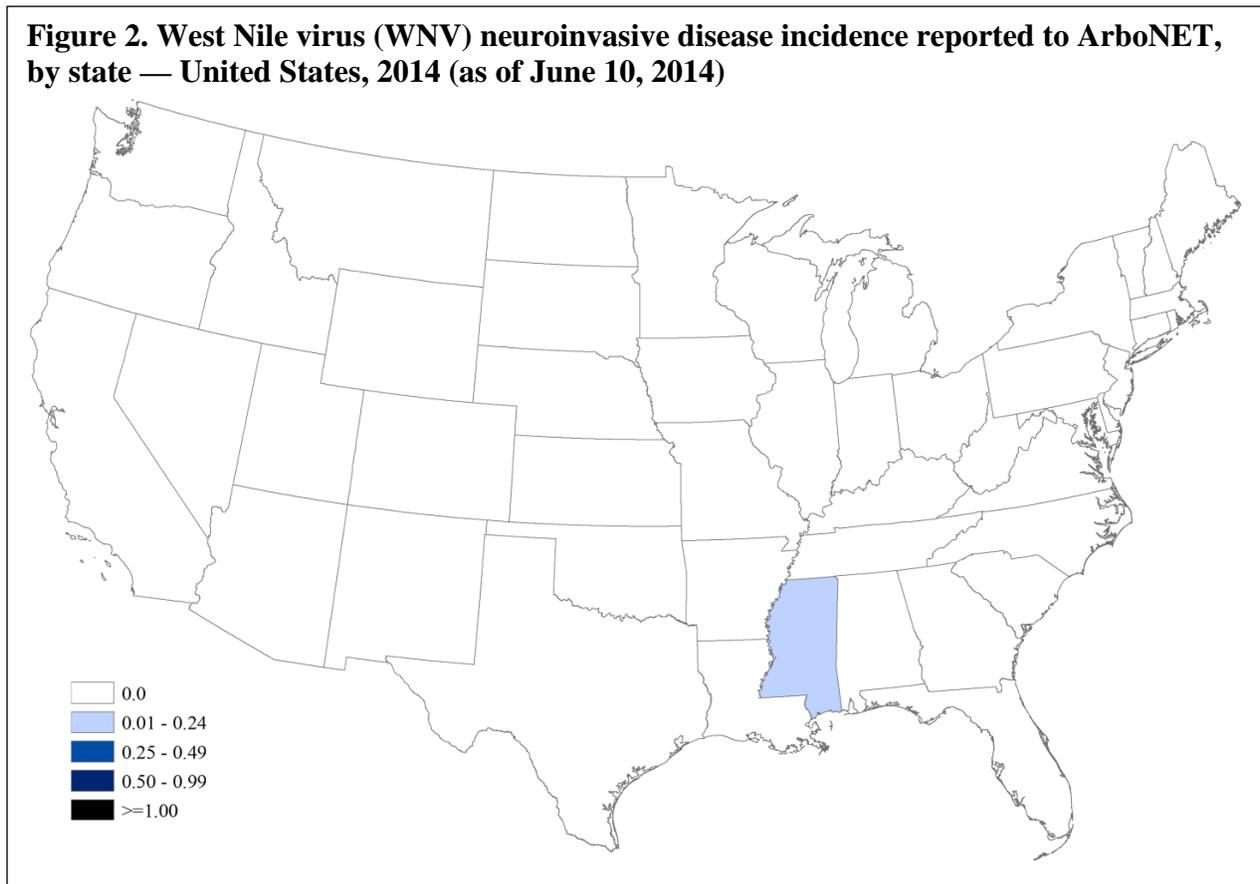
No WNV PVDs have been reported.

Table 1. West Nile virus infections in humans reported to ArboNET, 2014

State	Human disease cases reported to CDC*			Deaths	Presumptive viremic blood donors
	Neuroinvasive	Non-neuroinvasive	Total		
Mississippi	1	1	2	0	0
Totals	1	1	2	0	0

*Includes confirmed and probable cases

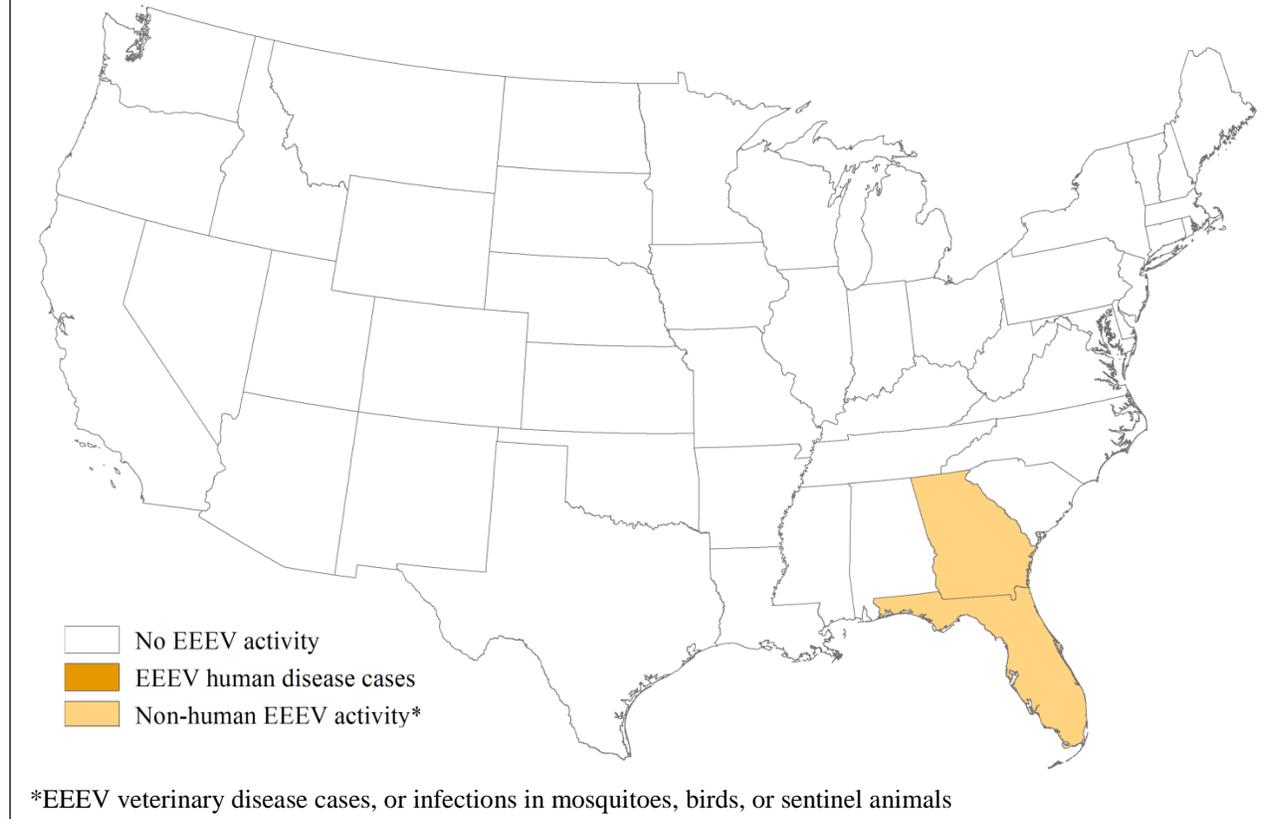
Figure 2. West Nile virus (WNV) neuroinvasive disease incidence reported to ArboNET, by state — United States, 2014 (as of June 10, 2014)



Eastern equine encephalitis virus (EEEV) activity in 2014

As of June 10th, 10 counties in two states (Florida and Georgia) have reported EEEV activity in non-human species to ArboNET for 2014 [Figure 3]. To date, no human cases of EEEV disease have been reported.

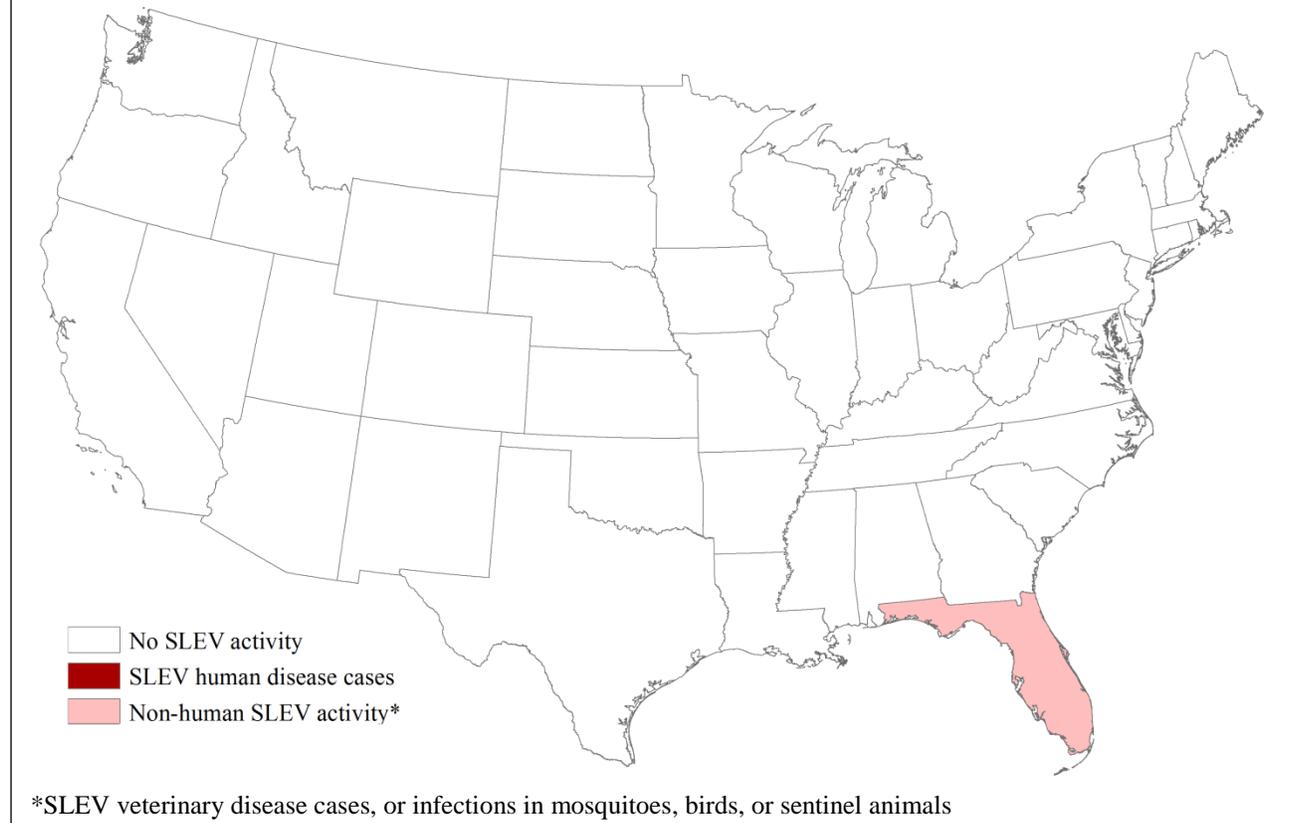
Figure 3. Eastern equine encephalitis virus (EEEV) activity reported to ArboNET, by state — United States, 2014 (as of June 10, 2014)



St. Louis encephalitis virus (SLEV) activity in 2014

As of June 10th, three counties in one state (Florida) reported SLEV activity in non-human species to ArboNET for 2014 [Figure 4]. To date, no human cases of SLEV disease have been reported.

Figure 4. St. Louis encephalitis virus (SLEV) activity reported to ArboNET, by state — United States, 2014 (as of June 10, 2014)



Other arboviral activity in 2014

As of June 10th, no states have reported La Crosse virus or Powassan virus activity to ArboNET for 2014.



About ArboNET

ArboNET is a national arboviral surveillance system managed by CDC and state health departments. In addition to human disease, ArboNET maintains data on arboviral infections among presumptive viremic blood donors (PVDs), veterinary disease cases, mosquitoes, dead birds, and sentinel animals. As with other national surveillance data, ArboNET data has several limitations that should be considered in analysis, interpretation, and reporting [Box].

Box: Limitations of ArboNET data

The following should be considered in the analysis, interpretation, and reporting of ArboNET data:

1. ArboNET is a passive surveillance system. It is dependent on clinicians considering the diagnosis of an arboviral disease and obtaining the appropriate diagnostic test, and reporting of laboratory-confirmed cases to public health authorities. Diagnosis and reporting are incomplete, and the incidence of arboviral diseases is underestimated.
2. Reported neuroinvasive disease cases are considered the most accurate indicator of arboviral activity in humans because of the substantial associated morbidity. In contrast, reported cases of nonneuroinvasive arboviral disease are more likely to be affected by disease awareness and healthcare-seeking behavior in different communities and by the availability and specificity of laboratory tests performed. Surveillance data for nonneuroinvasive disease should be interpreted with caution and generally should not be used to make comparisons between geographic areas or over time.

Additional resources

For additional arboviral disease information and data, please visit the following websites:

- CDC's Division of Vector-Borne Diseases:
<http://www.cdc.gov/ncezid/dvbd/>
- National Notifiable Diseases Surveillance System:
<http://wwwn.cdc.gov/NNDSS/script/casedef.aspx?CondYrID=616&DatePub=1/1/2011%2012:00:00%20AM>
- U.S. Geological Survey (USGS):
<http://diseasemaps.usgs.gov/>
- AABB (American Association of Blood Banks):
www.aabb.org/programs/biovigilance/Pages/wnv.aspx