



Reported WNV disease cases

To date, 2,204 human WNV disease cases have been reported from 672 counties in 45 states and the District of Columbia [**Table 1**]. Dates of illness onset for cases ranged from January–October [**Figure 2**].

Of the 2,204 reported cases, 1,342 (61%) were classified as neuroinvasive disease (e.g., meningitis or encephalitis) and 862 (39%) were classified as non-neuroinvasive disease [**Figure 3**].

Presumptive viremic donors (PVDs)

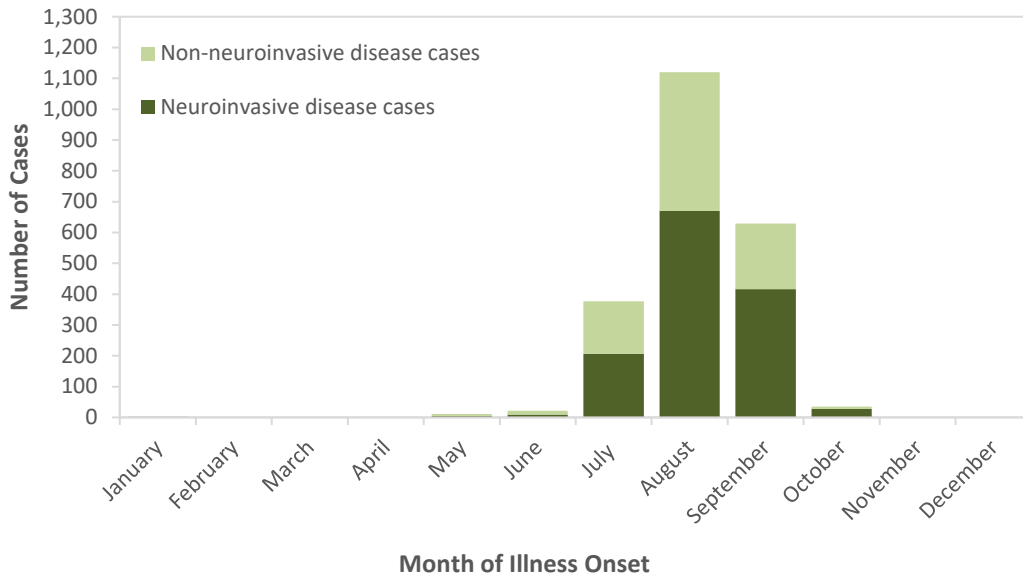
Overall, 322 WNV PVDs have been reported from thirty-three states [**Table 1**].

Table 1. West Nile virus infections in humans reported to ArboNET, 2018

State	Human disease cases reported to CDC*			Deaths	Presumptive viremic blood donors
	Neuroinvasive	Non-neuroinvasive	Total		
Alabama	15	13	28	0	3
Alaska	1	0	1	0	0
Arizona	17	0	17	2	0
Arkansas	5	2	7	0	0
California	108	48	156	7	24
Colorado	47	44	91	2	4
Connecticut	17	5	22	1	0
Delaware	6	1	7	2	1
District of Columbia	7	6	13	0	0
Florida	10	3	13	0	4
Georgia	23	6	29	2	1
Idaho	9	6	15	1	0
Illinois	92	43	135	8	12
Indiana	22	8	30	3	13
Iowa	55	40	95	5	8
Kansas	18	5	23	4	2
Kentucky	9	3	12	0	0
Louisiana	42	22	64	3	11
Maine	1	1	2	0	0
Maryland	33	8	41	0	4
Massachusetts	37	6	43	0	0
Michigan	79	19	98	8	12
Minnesota	18	21	39	0	24
Mississippi	27	16	43	0	2
Missouri	13	4	17	3	4
Montana	21	21	42	1	5
Nebraska	116	118	234	11	46
Nevada	3	5	8	0	2
New Jersey	39	16	55	3	6
New Mexico	4	1	5	0	2
New York	58	15	73	4	7
North Carolina	6	0	6	1	0
North Dakota	59	141	200	2	33
Ohio	37	20	57	5	14
Oklahoma	12	5	17	1	6
Oregon	2	1	3	0	0
Pennsylvania	67	19	86	5	16
South Carolina	9	3	12	1	4
South Dakota	47	121	168	4	19
Tennessee	9	1	10	4	1
Texas	75	28	103	2	23
Utah	7	4	11	1	0
Virginia	37	10	47	5	2
Washington	1	1	2	0	2
Wisconsin	19	1	20	0	5
Wyoming	3	1	4	1	0
Totals	1,342	862	2,204	102	322

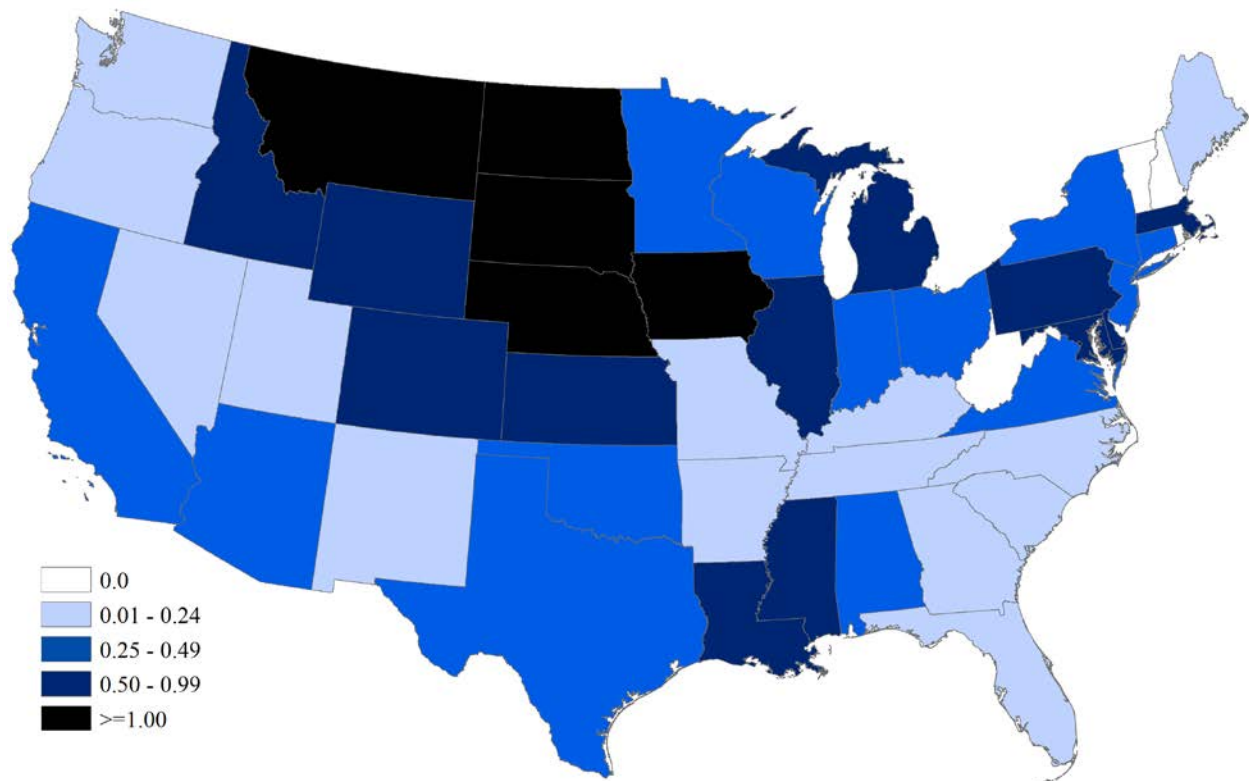
*Includes confirmed and probable cases

Figure 2. West Nile virus disease cases reported to ArboNET, by month of onset* — United States, 2018 (as of October 30, 2018)



*Cases missing onset date (n=4)

Figure 3. West Nile virus (WNV) neuroinvasive disease incidence* reported to ArboNET, by state — United States, 2018 (as of October 30, 2018)



*Incidence per 100,000 population

Eastern equine encephalitis virus (EEEV) activity in 2018

As of October 30th, five counties in three states have reported human cases of EEEV disease to ArboNET for 2018 [Figure 4 and Table 2]. Ninety additional counties in eighteen states reported EEEV activity in non-human species.

Figure 4. Eastern equine encephalitis virus (EEEV) activity reported to ArboNET, by state — United States, 2018 (as of October 30, 2018)

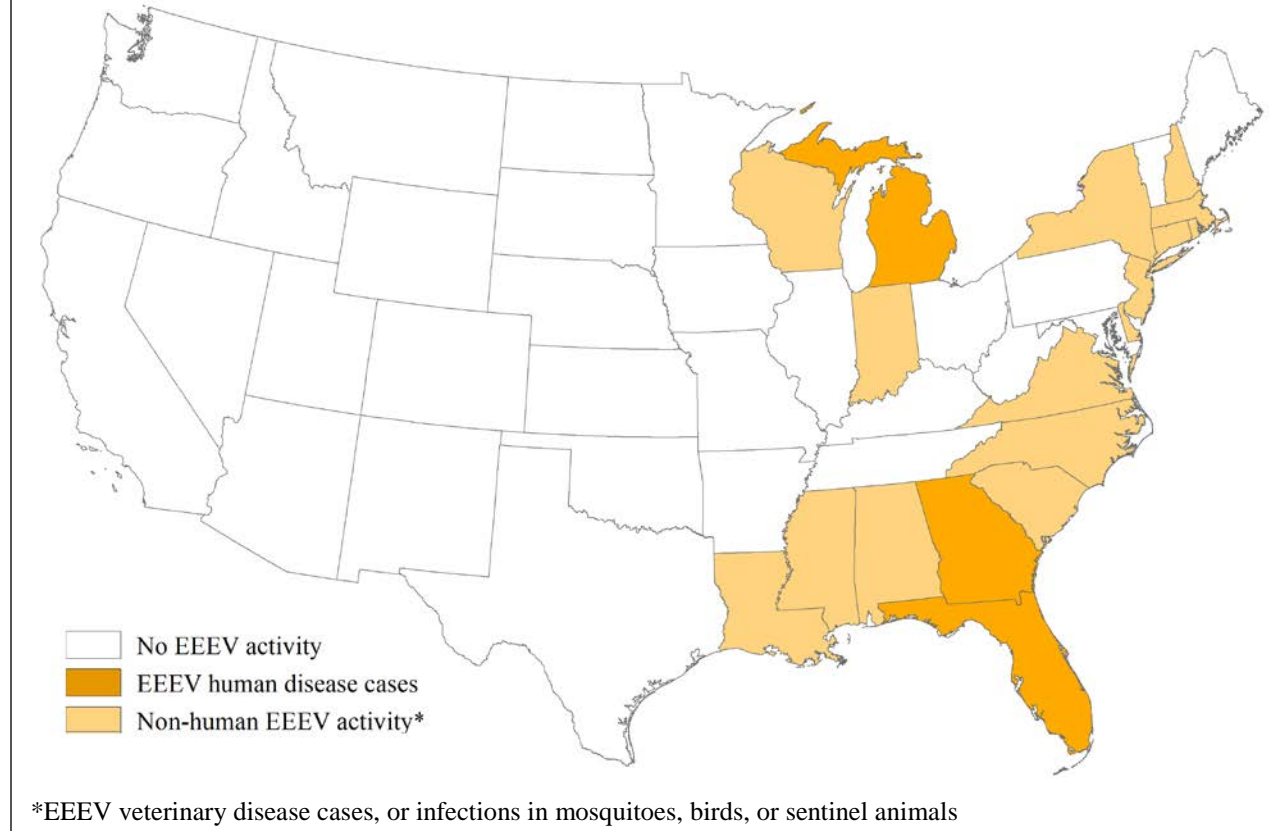


Table 2. Eastern equine encephalitis virus human disease cases reported to ArboNET, United States, 2018

State	Neuroinvasive disease cases	Non-neuroinvasive disease cases	Total cases*	Deaths
Florida	3	0	3	0
Georgia	1	0	1	1
Michigan	1	0	1	0
Totals	5	0	5	1

*Includes confirmed and probable cases.

Jamestown Canyon virus (JCV) activity in 2018

As of October 30th, twenty counties in six states have reported human cases of JCV disease to ArboNET for 2018 [Figure 5 and Table 3]. Fourteen counties in Connecticut and New York reported JCV activity in non-human species.

Figure 5. Jamestown Canyon virus (JCV) activity reported to ArboNET, by state — United States, 2018 (as of October 30, 2018)

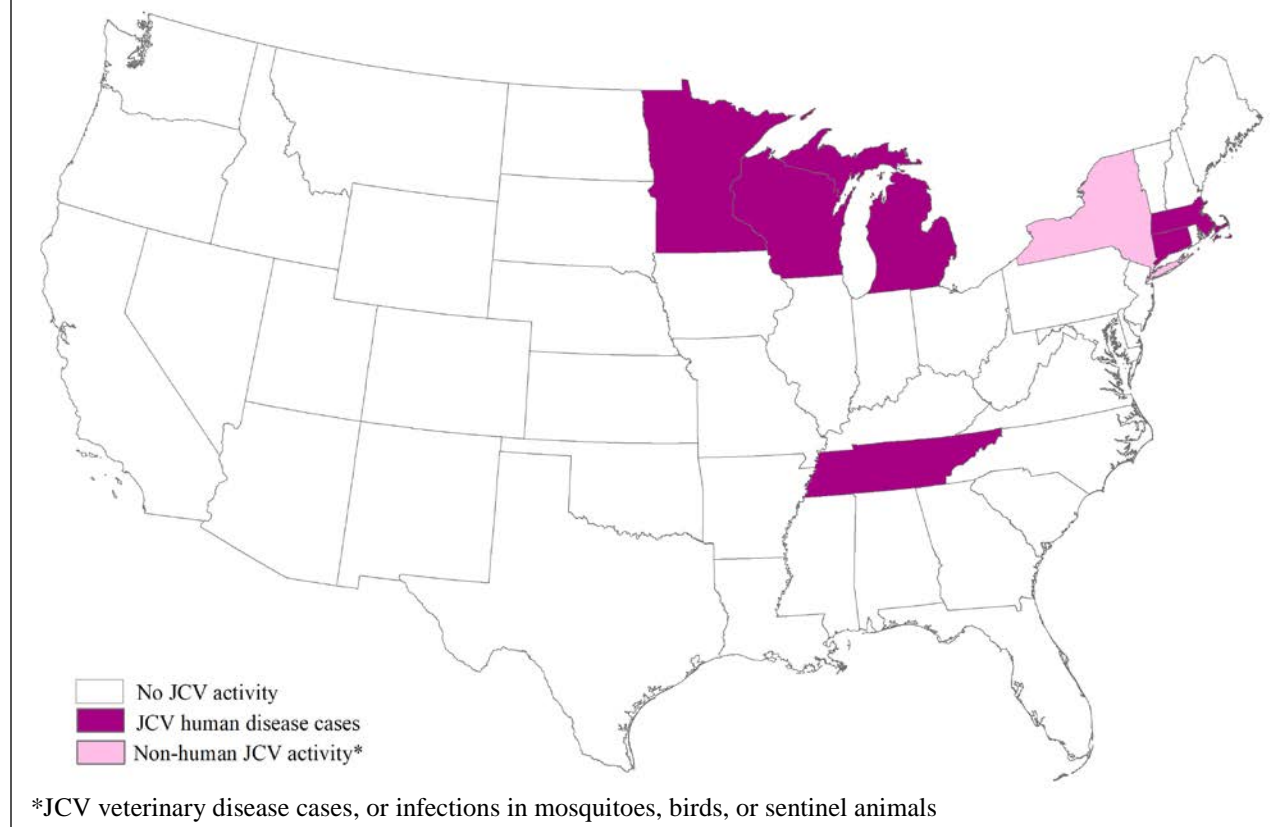


Table 3. Jamestown canyon virus human disease cases reported to ArboNET, United States, 2018

State	Neuroinvasive disease cases	Non-neuroinvasive disease cases	Total cases*	Deaths
Connecticut	1	0	1	0
Massachusetts	1	0	1	0
Michigan	1	0	1	0
Minnesota	2	2	4	0
Tennessee	1	0	1	0
Wisconsin	12	3	15	0
Totals	18	5	23	0

*Includes confirmed and probable cases.

La Crosse virus (LACV) activity in 2018

As of October 30th, thirty-eight counties in six states have reported human cases of LACV disease to ArboNET for 2018 [Figure 6 and Table 4]. Two counties in Connecticut and North Dakota have reported LACV activity in non-human species only.

Figure 6. La Crosse virus (LACV) activity reported to ArboNET, by state — United States, 2018 (as of October 30, 2018)

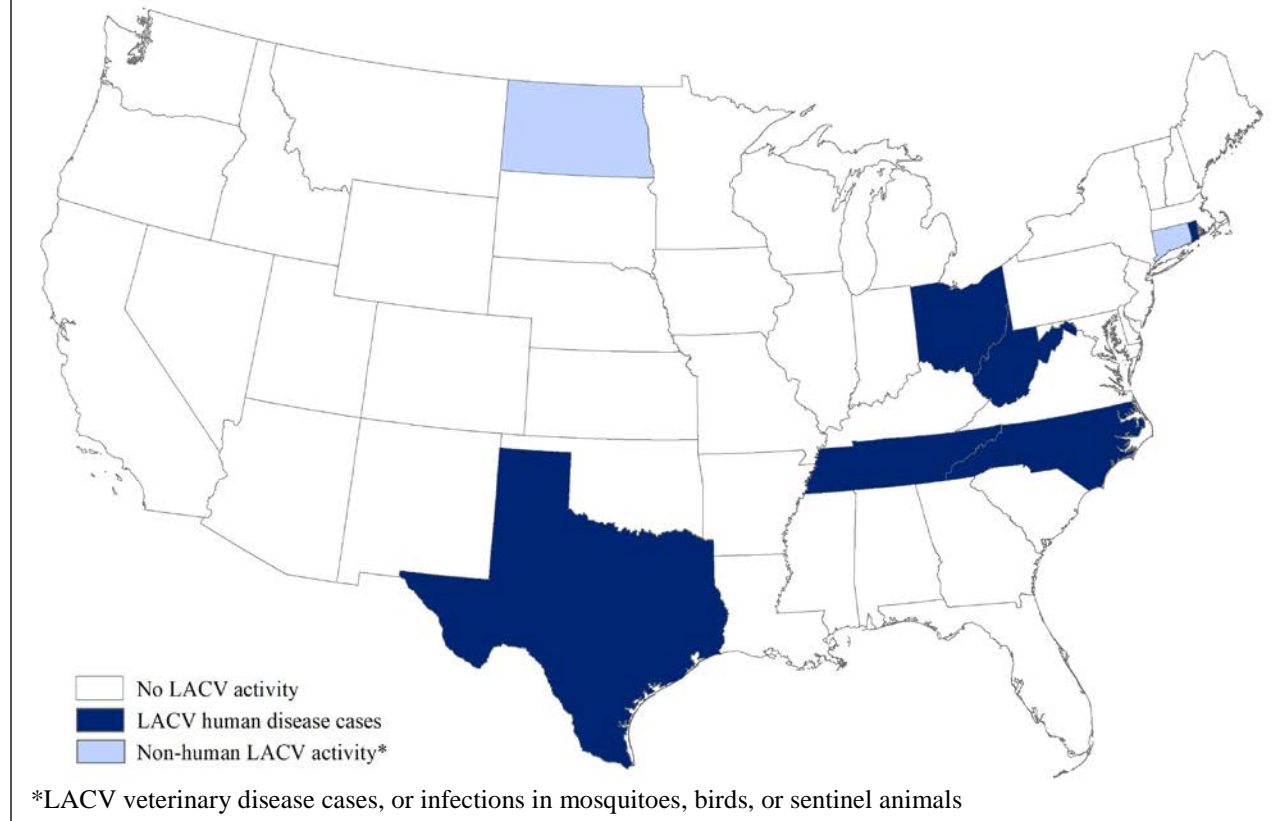


Table 4. La Crosse virus human disease cases reported to ArboNET, United States, 2018

State	Neuroinvasive disease cases	Nonneuroinvasive disease cases	Total cases*	Deaths
North Carolina	16	0	16	0
Ohio	30	1	31	0
Rhode Island	1	0	1	0
Tennessee	9	1	10	0
Texas	1	0	1	0
West Virginia	4	1	5	0
Totals	61	3	64	0

*Includes confirmed and probable cases.

Powassan virus (POWV) activity in 2018

As of October 30th, twelve counties in five states have reported human cases of POWV disease to ArboNET for 2018 [Figure 7 and Table 5].

Figure 7. Powassan virus (POWV) activity reported to ArboNET, by state — United States, 2018 (as of October 30, 2018)

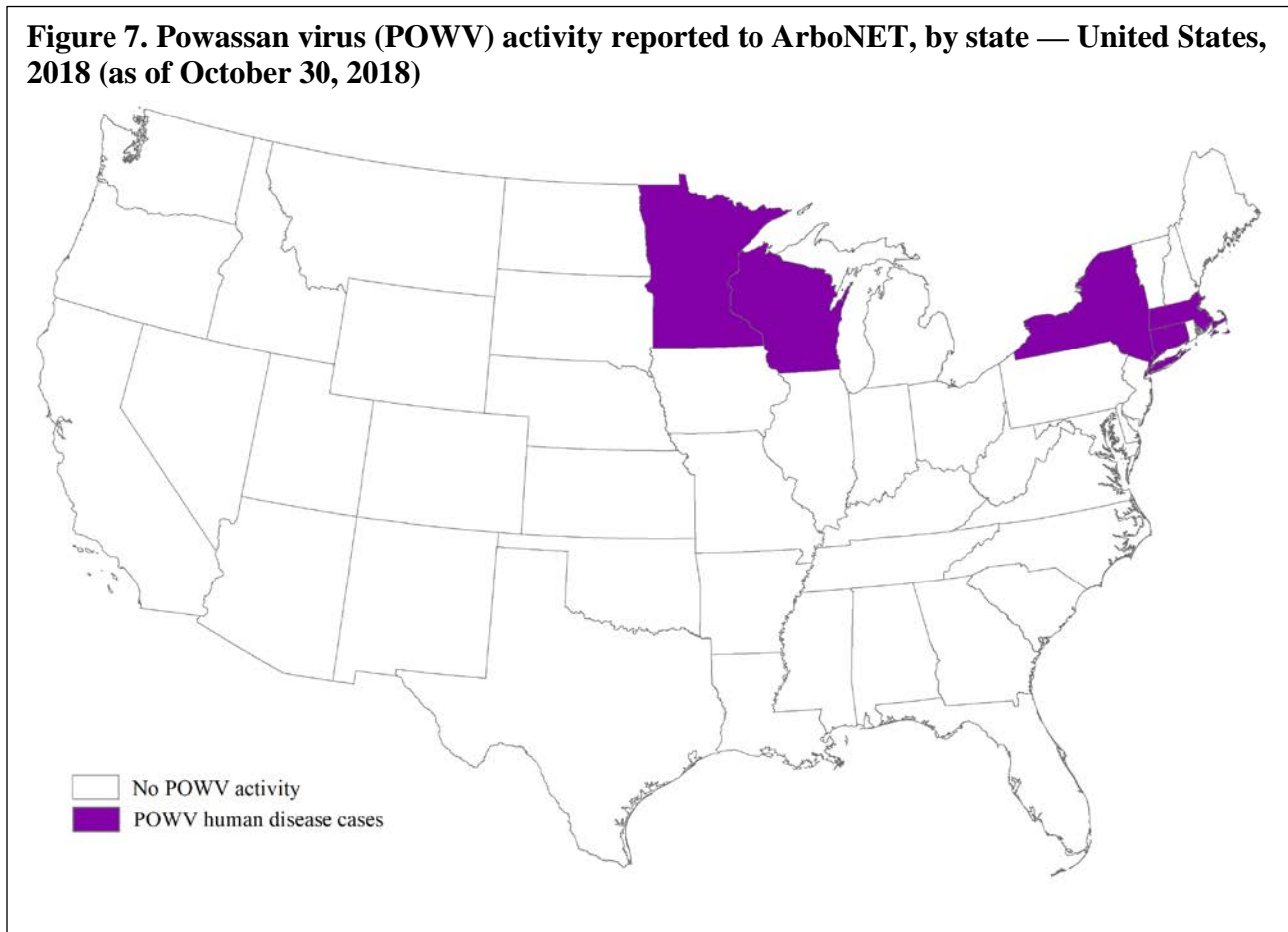


Table 5. Powassan virus human disease cases reported to ArboNET, United States, 2018

State	Neuroinvasive disease cases	Nonneuroinvasive disease cases	Total cases*	Deaths
Connecticut	2	0	2	0
Massachusetts	4	0	4	0
Minnesota	3	0	3	0
New York	4	0	4	0
Wisconsin	1	0	1	0
Totals	14	0	14	0

*Includes confirmed and probable cases.

St. Louis encephalitis virus (SLEV) activity in 2018

As of October 30th, four counties in four states have reported human cases of SLEV disease to ArboNET for 2018 [Figure 8 and Table 6]. Twenty-two counties in eight states have reported SLEV activity in non-human species only.

Figure 8. St. Louis encephalitis virus (SLEV) activity reported to ArboNET, by state — United States, 2018 (as of October 30, 2018)

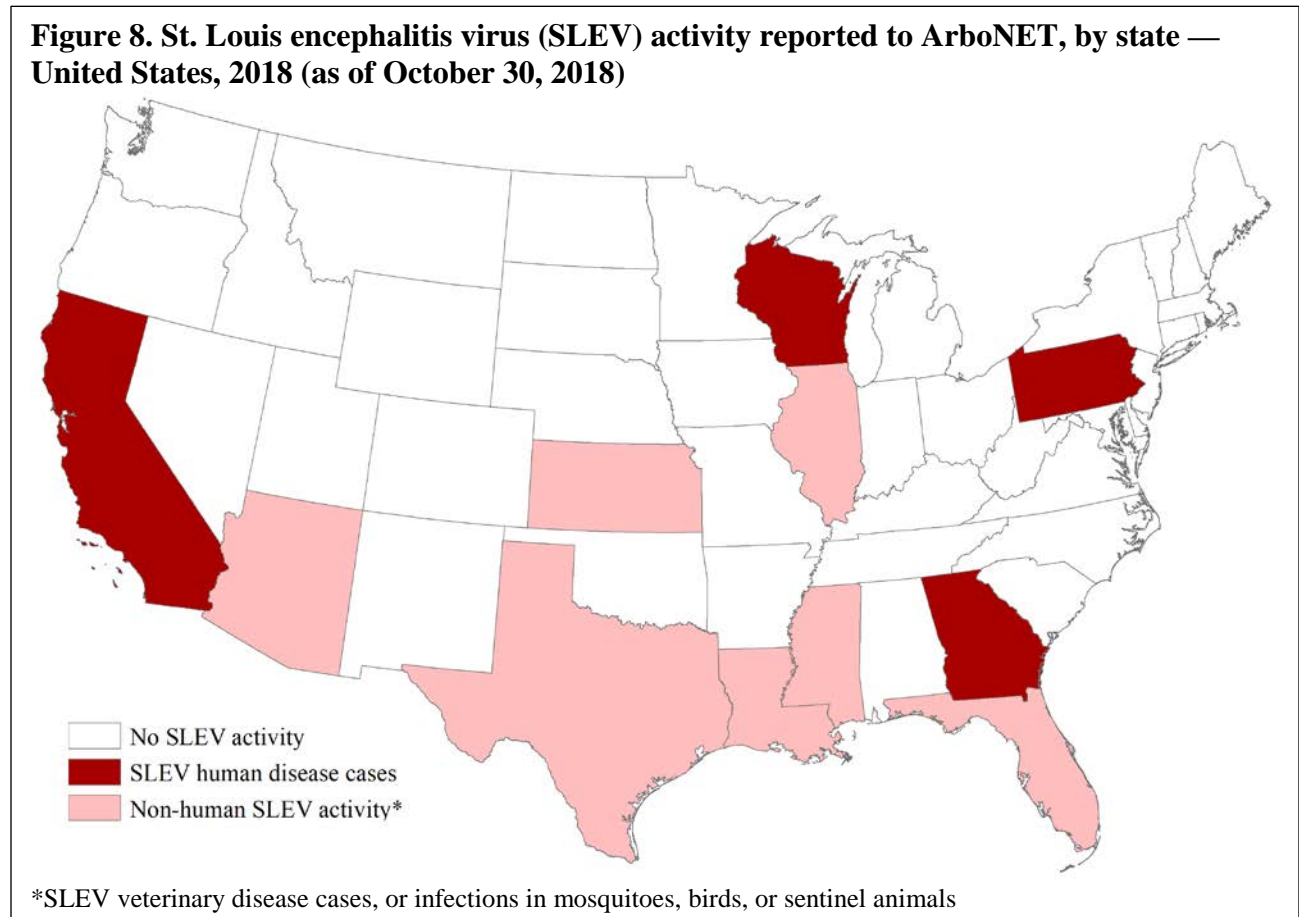


Table 6. St. Louis encephalitis virus human disease cases reported to ArboNET, United States, 2018

State	Neuroinvasive disease cases	Non-neuroinvasive disease cases	Total cases*	Deaths
California	1	0	1	0
Georgia	0	1	1	0
Pennsylvania	0	1	1	0
Wisconsin	1	0	1	1
Totals	2	2	4	1

*Includes confirmed and probable cases.



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/conditions/arboviral-diseases-neuroinvasive-and-non-neuroinvasive/case-definition/2015/>
- CDC Disease Maps
https://wwwn.cdc.gov/arboNET/Maps/ADB_Diseases_Map/index.html
- AABB (American Association of Blood Banks):
www.aabb.org/programs/biovigilance/Pages/wnv.aspx