

NYSDOH STATEWIDE MOSQUITO-BORNE DISEASE ACTIVITY REPORT October 17, 2019

The New York State Department of Health (NYSDOH) collects, compiles, and analyzes information on mosquito-borne disease activity in New York State (NYS) and produces this weekly report during the mosquito season. Data in this report reflects testing performed by both NYSDOH's Wadsworth Center Laboratories (WC) and the New York City Department of Health and Mental Hygiene's (NYCDOHMH) Public Health Laboratory (PHL). Reports are generally issued on Wednesdays and reflect data reported through the previous Saturday.

Summary:

From October 11 through October 16:

- West Nile Virus (WNV):
 - 18 WNV-positive mosquito pools were identified. (NYC 18)
 - o 0 human cases of WNV infection were reported.
 - o 0 equine cases of WNV infection were reported.
 - 0 WNV presumptive viremic donors were reported to the Centers for Disease Control and Prevention (CDC).¹
- Eastern Equine Encephalitis Virus (EEEv):
 - 0 EEEv-positive mosquito pools were identified.
 - 0 human cases of EEEv infection were reported.
 - o 1 equine case of EEEv infection was reported. (Cattaraugus 1)
 - 0 caprine cases of EEEv infection were reported.²
 - 0 ratite cases of EEEv infection were reported.³
- Zika Virus (ZIKV):
 - Aedes albopictus was not identified in any additional counties. Aedes aegypti was not identified anywhere in the State.
 - o 0 mosquito pools were positive for Zika virus.
 - 1 human (Orleans 1) case was reported to NYSDOH. No cases of Local mosquito-borne transmission (LMBT) were identified.⁴
- Chikungunya Virus (CHIKV), Dengue Virus (DENV), and Malaria:5
 - 1 human case of CHIKV infection (Tompkins 1) was reported to NYSDOH. No cases of LMBT were identified.
 - 1 human case of DENV infection (Nassau 1) was reported to NYSDOH. No cases of LMBT were identified.
 - 0 human cases of Malaria infection were reported to NYSDOH. No cases of LMBT were identified.

Year to date:

WNV:

- 571 WNV-positive mosquito pools have been identified.
- o 11 human cases of WNV infection have been reported.
- o 0 equine cases of WNV infection have been reported.
- 1 WNV presumptive viremic donor has been reported to CDC.

EEEv:

- 66 EEEv-positive mosquito pools have been identified.
- 0 human cases of EEEv infection have been reported.
- 7 equine cases of EEEv infection have been reported.
- 1 caprine case of EEEv infection has been reported.
- 1 ratite case of EEEv infection has been reported.

ZIKV:

- Aedes albopictus has been identified in 5 counties (Nassau, Orange, Rockland, Suffolk, Westchester) and in NYC. Aedes aegypti has not been identified anywhere in the state.
- 0 mosquito pools have been positive for Zika virus.
- o 6 human cases have been reported to NYSDOH. No cases of LMBT have been identified.

• CHKV, DENV, and Malaria:

- 3 human cases of CHIKV infection have been reported to NYSDOH. No cases of LMBT have been identified.
- 25 human cases of DENV infection have been reported to NYSDOH. No cases of LMBT have been identified.
- 38 human cases of Malaria infection have been reported to NYSDOH. No cases of LMBT have been identified.

¹Presumptive viremic donors (PVDs) are people who had no symptoms at the time of donating blood (people with symptoms are deferred from donating) through a blood collection agency, but whose blood tested positive in preliminary tests when screened for the presence of West Nile virus. Some PVDs do go on to develop symptoms after donation, at which point they would be included in the count of human disease cases by their state.

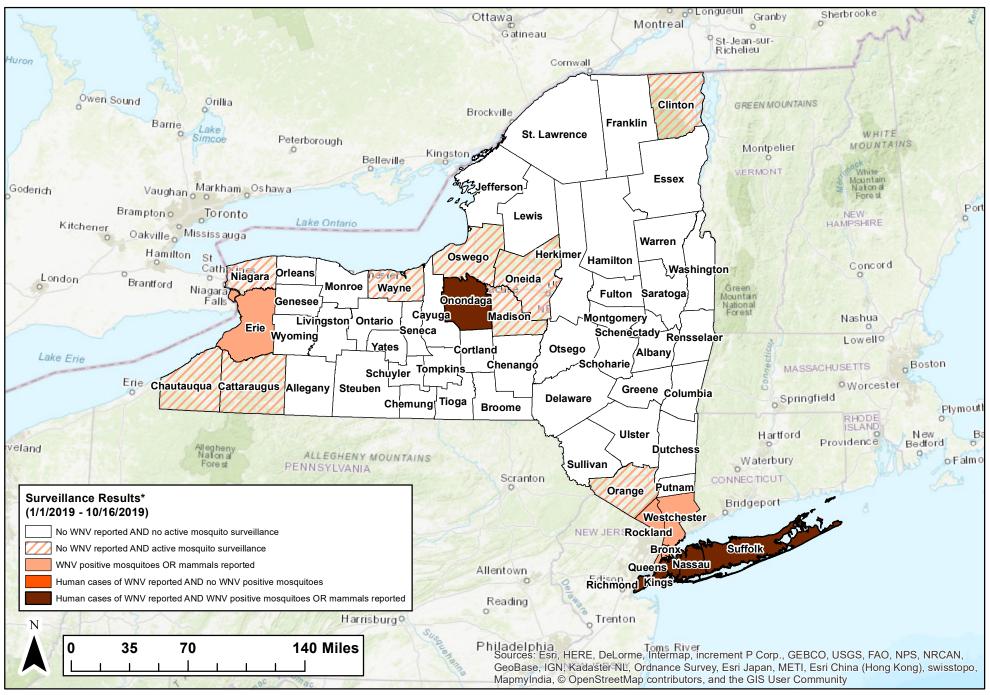
² Caprine – of, relating to, or being a goat.

³Ratite – (of a bird) having a flat breastbone without a keel, and so unable to fly.

⁴Local mosquito-borne transmission is defined by the absence of the following epidemiological risk factors: recent travel to a country or region with known active ZIKV transmission OR sexual contact with a recent traveler from these areas; recent blood transfusion; recent laboratory exposure to ZIKV; or mother-to-child transmission during pregnancy. NYCDOHMH directly reports human cases of ZIKv infection to CDC.

⁵NYCDOHMH directly reports human cases of CHIKV, DENV and malaria infection to CDC.

2019 West Nile Virus Surveillance Summary

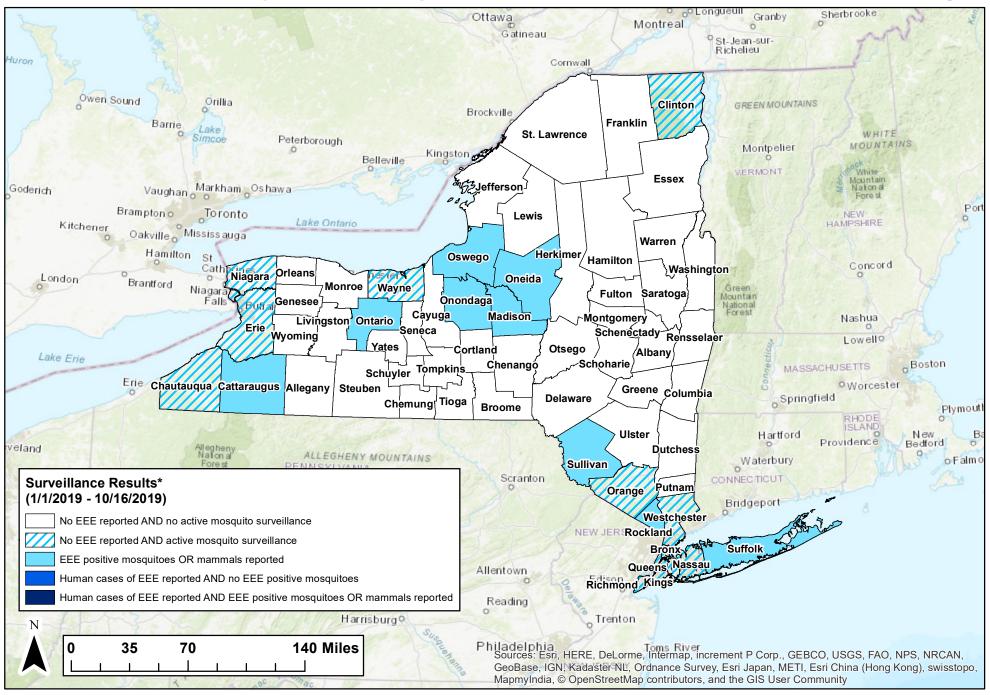


^{*}The number of WNV positive mosquitoes, mammal infections or human cases depends, in part, on the amount of surveillance and testing performed in each county, and is not necessarily associated with the degree of WNV risk.

-- Map shows results reported through date range indicated.

Map Scale: 1:3,000,000

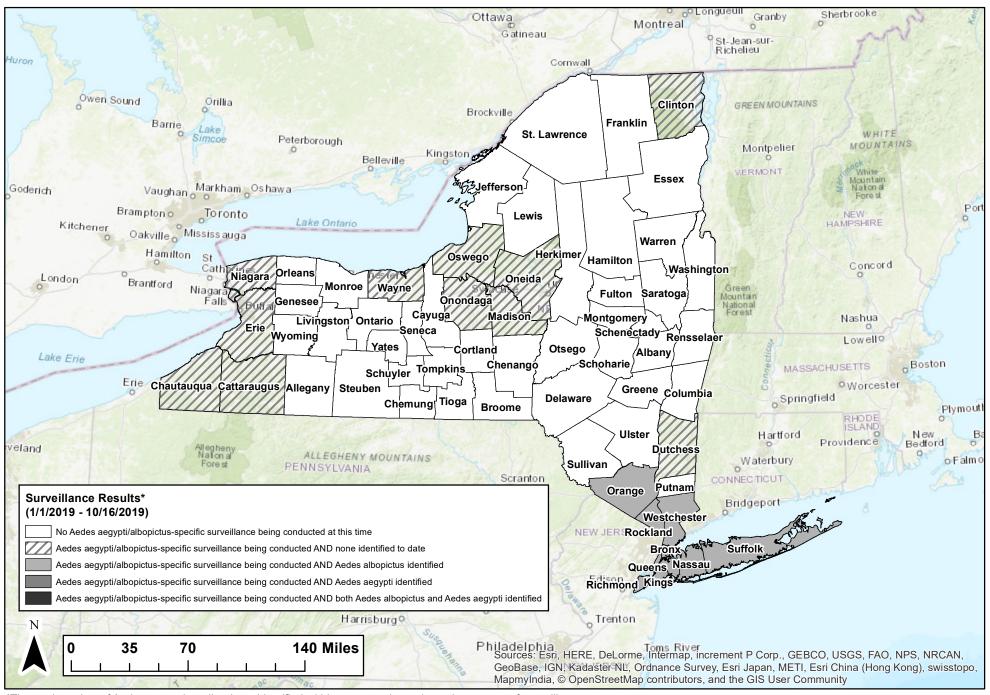
2019 Eastern Equine Encephalitis Virus Surveillance Summary



^{*}The number of EEE positive mosquitoes, mammal infections or human cases depends, in part, on the amount of surveillance and testing performed in each county, and is not necessarily associated with the degree of EEE risk.

⁻⁻ Map shows results reported through date range indicated.

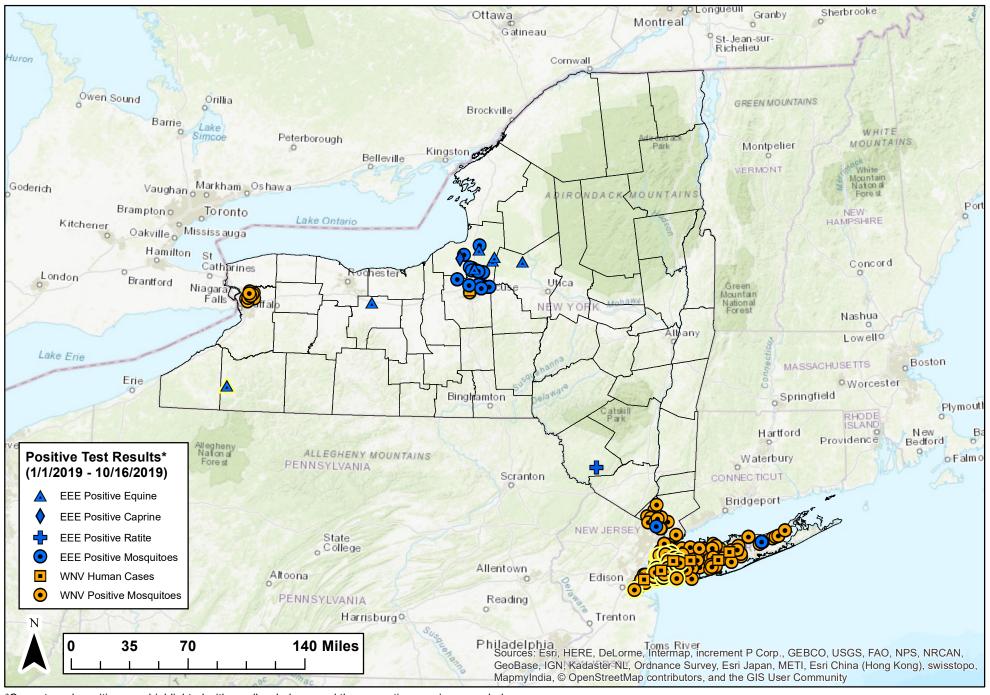
2019 Aedes aegypti/albopictus Surveillance Summary



^{*}The total number of Aedes aegypti or albopictus identified within a county depends on the amount of surveillance performed in each county, and is not necessarily associated with degree of Zika risk.

⁻⁻ Map shows results reported through date range indicated.

2019 Mosquito-borne Illness Surveillance



*Current week positives are highlighted with a yellow halo around the respective specimen symbols.

NYSDOH, BCDC - October 16, 2019

⁻⁻ Human cases represent local mosquito-borne transmission (LMBT). Travel associated cases are not included.

⁻⁻ NYC positive human cases are placed randomly in the patient's county of residence.

⁻⁻ Map shows results reported through date range indicated.

New York State Arboviral Surveillance Summary 1/1/19-10/16/19

| Jurisdiction | Eastern Equine Encephalitis | | | | | | West Nile | | | |
|---------------------------|-----------------------------|--------|------------|------------|-------------------------|-------|-----------|-------------------------|--|--|
| | Cases | | | | Positive Mosquito Pools | Ca | ises | Positive Mosquito Pools | | |
| | Human | Equine | Caprine*** | Ratite**** | | Human | Equine | | | |
| ALBANY | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| ALLEGANY | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| BROOME | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| CATTARAUGUS* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| CAYUGA | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| CHAUTAUQUA* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| CHEMUNG | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| CHENANGO | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| CLINTON* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| COLUMBIA | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| CORTLAND | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| DELAWARE | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| DUTCHESS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| ERIE* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | | |
| ESSEX | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| FRANKLIN | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| FULTON | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| GENESEE | 0 | 0 | 0 | 0 | | 0 | 0 | <u></u> | | |
| GREENE | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| HAMILTON | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| HERKIMER | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| | | | | | | | | | | |
| JEFFERSON | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| LEWIS | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| LIVINGSTON | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| MADISON* | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | | |
| MONROE | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| MONTGOMERY | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| NASSAU* | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 36 | | |
| NIAGARA* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| ONEIDA* | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| ONONDAGA* | 0 | 0 | 0 | 0 | 14 | 1 | 0 | 4 | | |
| ONTARIO | 0 | 1 | 0 | 0 | | 0 | 0 | | | |
| ORANGE* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| ORLEANS | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| OSWEGO* | 0 | 4 | 1 | 0 | 40 | 0 | 0 | 0 | | |
| OTSEGO | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| PUTNAM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| RENSSELAER | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| ROCKLAND* | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 36 | | |
| ST LAWRENCE | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| SARATOGA | 0 | 0 | 0 | 0 | <u> </u> | 0 | 0 | <u>-</u> | | |
| SCHENECTADY | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| SCHOHARIE | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| | | + | 0 | 0 | | 0 | 0 | | | |
| SCHUYLER | 0 | 0 | | | | | | | | |
| SENECA | 0 | 0 | 0 | 0 | | 0 | 0 | - | | |
| STEUBEN | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| SUFFOLK* | 0 | 0 | 0 | 0 | 9 | 2 | 0 | 77 | | |
| SULLIVAN | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | | |
| TIOGA | 0 | 0 | 0 | 0 | | 0 | 0 | - | | |
| TOMPKINS | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| ULSTER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| WARREN | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| WASHINGTON | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| WAYNE* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| WESTCHESTER* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | | |
| WYOMING | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| YATES | 0 | 0 | 0 | 0 | | 0 | 0 | | | |
| NYS (excluding NYC) TOTAL | 0 | 7 | 1 | 1 | 66 | 4 | 0 | 165 | | |
| NYC* TOTAL | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 406 | | |
| NYS TOTAL | 0 | 7 | 1 | 1 | 66 | 11 | 0 | 571 | | |

^{*} Jurisdiction conducting mosquito surveillance.

** Number(s) in parentheses indicates fatal case(s)

*** Caprine – of, relating to, or being a goat.

**** Ratite – (of a bird) having a flat breastbone without a keel, and so unable to fly.

New York State Arboviral Surveillance Summary 1/1/19-10/16/19

| | Zika | | | | | | | |
|---------------------------|-------------------|-------------------|----------|--|--|--|--|--|
| | Human | Positive Mosquito | | | | | | |
| Jurisdiction | Travel associated | LMBT** | Pools | | | | | |
| ALBANY | 0 | 0 | | | | | | |
| ALLEGANY | 0 | 0 | | | | | | |
| BROOME | 0 | 0 | | | | | | |
| CATTARAUGUS* | 0 | 0 | 0 | | | | | |
| CAYUGA | 0 | 0 | | | | | | |
| CHAUTAUQUA* | 0 | 0 | 0 | | | | | |
| CHEMUNG | 0 | 0 | | | | | | |
| CHENANGO | 0 | 0 | | | | | | |
| CLINTON* | 0 | 0 | 0 | | | | | |
| COLUMBIA | 0 | 0 | | | | | | |
| CORTLAND | 0 | 0 | - | | | | | |
| DELAWARE | 0 | 0 | | | | | | |
| DUTCHESS* | 0 | 0 | 0 | | | | | |
| ERIE* | 0 | 0 | 0 | | | | | |
| ESSEX FRANKLIN | 0 | 0 | | | | | | |
| FULTON | 0 | 0 | | | | | | |
| GENESEE | 0 | 0 | | | | | | |
| GREENE | 0 | 0 | | | | | | |
| HAMILTON | 0 | 0 | | | | | | |
| HERKIMER | 0 | 0 | <u>-</u> | | | | | |
| JEFFERSON | 0 | 0 | | | | | | |
| LEWIS | 0 | 0 | <u>-</u> | | | | | |
| LIVINGSTON | 0 | 0 | | | | | | |
| MADISON* | 0 | 0 | 0 | | | | | |
| MONROE | 0 | 0 | | | | | | |
| MONTGOMERY | 0 | 0 | | | | | | |
| NASSAU* | 4 | 0 | 0 | | | | | |
| NIAGARA* | 0 | 0 | 0 | | | | | |
| ONEIDA* | 0 | 0 | 0 | | | | | |
| ONONDAGA* | 0 | 0 | 0 | | | | | |
| ONTARIO | 0 | 0 | | | | | | |
| ORANGE* | 0 | 0 | 0 | | | | | |
| ORLEANS | 1 | 0 | | | | | | |
| OSWEGO* | 0 | 0 | 0 | | | | | |
| OTSEGO | 0 | 0 | | | | | | |
| PUTNAM* | 0 | 0 | 0 | | | | | |
| RENSSELAER | 0 | 0 | | | | | | |
| ROCKLAND* | 0 | 0 | 0 | | | | | |
| ST LAWRENCE | 0 | 0 | | | | | | |
| SARATOGA | 0 | 0 | | | | | | |
| SCHENECTADY | 0 | 0 | | | | | | |
| SCHOHARIE | 0 | 0 | | | | | | |
| SCHUYLER | 0 | 0 | | | | | | |
| SENECA | 0 | 0 | | | | | | |
| STEUBEN | 0 | 0 | | | | | | |
| SUFFOLK* | 1 | 0 | 0 | | | | | |
| SULLIVAN | 0 | 0 | 0 | | | | | |
| TIOGA | 0 | 0 | | | | | | |
| TOMPKINS | 0 | 0 | | | | | | |
| ULSTER WARREN | 0 | 0 | 0 | | | | | |
| WASHINGTON | 0 | 0 | | | | | | |
| WASHINGTON WAYNE* | 0 | 0 | 0 | | | | | |
| WESTCHESTER* | 0 | 0 | 0 | | | | | |
| WYOMING | 0 | 0 | | | | | | |
| YATES | 0 | 0 | | | | | | |
| NYS (excluding NYC) TOTAL | 6 | 0 | 0 | | | | | |
| NYC*† TOTAL | | | | | | | | |
| NYS TOTAL | 6 | 0 | 0 | | | | | |
| | | 1 | 1 | | | | | |

^{*} Jurisdiction conducting mosquito surveillance.

**Local mosquito-borne transmission.

†NYCDOHMH directly reports human cases of ZIKv infection to CDC.

New York State Arboviral Surveillance Summary 1/1/19-10/16/19

| | | Chikunguny | /a | Dengue | | | Malaria | | | |
|---------------------------|-------------------|------------|-------------------|----------------------|--------|-------------------------|-----------------------|--------|-------------------------------|--|
| | Humar | n Cases | Positive | Human Cases Begitive | | | Human Cases Danishing | | | |
| Jurisdiction | Travel associated | LMBT** | Mosquito Pools | Travel associated | LMBT** | Positive Mosquito Pools | Travel associated | LMBT** | Positive Mosquito Pools | |
| ALBANY | 0 | 0 | | 1 | 0 | | 1 | 0 | | |
| ALLEGANY | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| BROOME | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| CATTARAUGUS* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| CAYUGA | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| CHAUTAUQUA* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| CHEMUNG | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| CHENANGO | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| CLINTON* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| COLUMBIA | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| CORTLAND | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| DELAWARE | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| DUTCHESS | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | |
| ERIE* | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | |
| ESSEX | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| FRANKLIN | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| FULTON | | | | | | - | | | | |
| GENESEE | 0 | 0 | | 0 | 0 | - | 0 | 0 | | |
| | | | | | | | | | | |
| GREENE | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| HAMILTON | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| HERKIMER | 0 | 0 | | 1 | 0 | | 0 | 0 | | |
| JEFFERSON | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| LEWIS | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| LIVINGSTON | 0 | 0 | | 0 | 0 | - | 0 | 0 | | |
| MADISON* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| MONROE | 0 | 0 | | 1 | 0 | | 2 | 0 | | |
| MONTGOMERY | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| NASSAU* | 0 | 0 | 0 | 5 | 0 | 0 | 8 | 0 | 0 | |
| NIAGARA* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ONEIDA* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ONONDAGA* | 0 | 0 | 0 | 2 | 0 | 0 | 5 | 0 | 0 | |
| ONTARIO | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| ORANGE* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| ORLEANS | 1 | 0 | | 0 | 0 | | 0 | 0 | | |
| OSWEGO* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| OTSEGO | 0 | 0 | | 2 | 0 | | 0 | 0 | | |
| PUTNAM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| RENSSELAER | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| ROCKLAND* | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | |
| ST LAWRENCE | 0 | 0 | | 1 | 0 | | 0 | 0 | | |
| SARATOGA | 0 | 0 | | 1 | 0 | | 0 | 0 | | |
| SCHENECTADY | 0 | 0 | | 0 | 0 | | 1 | 0 | | |
| SCHOHARIE | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| SCHUYLER | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| SENECA | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| STEUBEN | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| SUFFOLK* | 1 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | |
| SULLIVAN | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| TIOGA | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| TOMPKINS | 1 | 0 | | 0 | 0 | | 0 | 0 | | |
| ULSTER | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| WARREN | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| WASHINGTON | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| WAYNE* | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| WESTCHESTER* | 0 | 0 | 0 | 3 | 0 | 0 | 11 | 0 | 0 | |
| WYOMING | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| | | | | | | | 1 | | | |
| YATES | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| NYS (excluding NYC) TOTAL | 3 | 0 | 0 | 25 | 0 | 0 | 38 | 0 | 0 | |
| NYC*† TOTAL | | 0 | | | 0 | 0 | | 0 | | |
| NYS TOTAL | 3 | 0 | 0 | 25 | 0 | 0 | 38 | 0 | 0 | |

 $^{{}^{*}\}text{Jurisdiction conducting mosquito surveillance}.$

[&]quot;Local mosquito-borne transmission.

 $^{^{\}dagger}$ NYCDOHMH directly reports human cases of CHKV, DENV and malaria infection to CDC.

United States Mosquito-Borne Disease Surveillance and Other Information

Current and historic nationwide surveillance information on mosquito-borne illnesses in the United States can be found at https://wwwn.cdc.gov/arbonet/Maps/ADB Diseases Map/index.html

- Specific information about WNV, including statistics and maps, can be found at http://www.cdc.gov/westnile/.
- Specific information about EEEv, including statistics and maps, can be found at http://www.cdc.gov/EasternEquineEncephalitis.
- Specific information about Zika virus, including statistics and maps of areas with active mosquito-borne transmission of Zika virus can be found at http://www.cdc.gov/zika/.
- Specific information about chikungunya virus, including statistics and maps, can be found at http://www.cdc.gov/chikungunya/.
- Specific information about dengue fever, including statistics and maps, can be found at can be at http://www.cdc.gov/dengue/.
- Specific information about malaria, including statistics and maps, can be found here at http://www.cdc.gov/malaria/.