NYSDOH STATEWIDE MOSQUITO-BORNE DISEASE ACTIVITY REPORT
September 14, 2016

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 September 4 through September 10:

- West Nile Virus (WNV):
  - 23 WNV-positive mosquito pools were identified (Erie 2, Nassau 3, Rockland 10, Suffolk 7, Westchester 1).
  - 1 human case of WNV infection was reported (NYC).
  - 2 equine cases of WNV infection were reported (Suffolk 1, St. Lawrence 1).
  - 1 WNV presumptive viremic donor was reported to CDC (Niagara). The donor was asymptomatic.[1]
- Eastern Equine Encephalitis Virus (EEEv):
  - 3 EEEv-positive mosquito pools were identified (Oswego).
  - 0 human cases of EEEv infection were reported.
  - 0 equine cases of EEEv infection were reported.
- Zika Virus (ZIKV):
  - *Aedes albopictus* was not identified in any additional counties. *Aedes aegypti* was not identified anywhere in the State.
  - 0 mosquito pools were positive for Zika virus.
  - 23 human cases (Clinton 1, Jefferson 1, Monroe 1, Nassau 3, Suffolk 2, NYC 15) were reported to NYSDOH, all of which were travel-associated.[2]
  - 2 pregnant women with laboratory evidence of possible Zika virus infection were reported to the Centers for Disease Control and Prevention's (CDC) Zika Pregnancy Registry by NYSDOH.[3]
    - NYCDOHMH directly reports pregnant women with laboratory evidence of possible Zika virus infection who reside within NYC to CDC's Zika Pregnancy Registry.
  - No cases of local, mosquito-borne transmission (LMBT) were identified.[4]
- Chikungunya Virus (CHKV), Dengue Virus (DENV), and Malaria:[5]
  - No human cases of CHKV infection were reported to NYSDOH. No cases of LMBT were identified.
  - 2 human cases of DENV infection (Nassau 1, Westchester 1) were reported to NYSDOH, all of which were travel-associated. No cases of LMBT were identified.
  - 1 human case of Malaria infection (Ulster) was reported to NYSDOH, which was travel-associated. No cases of LMBT were identified.

Year to date:

- WNV:
  - 447 WNV-positive mosquito pools have been identified.
  - 1 human case of WNV infection has been reported.
  - 3 equine cases of WNV infection have been reported.
  - 1 WNV presumptive viremic donor was reported to CDC (Niagara). The donor was asymptomatic.
- EEEv:
  - 5 EEEv-positive mosquito pools have been identified.
  - 0 human cases of EEEv infection have been reported.
  - 1 equine case of EEEv infection has been reported.
- ZIKV:
  - *Aedes albopictus* has been identified in 4 counties (Nassau, Rockland, Suffolk, Westchester) and NYC. *Aedes aegypti* has not been identified anywhere in the State.
  - 0 mosquito pools have been positive for Zika virus.
  - 749 human cases have been reported to NYSDOH, all of which were travel-associated.
  - 39 pregnant women with laboratory evidence of possible Zika virus infection have been reported to the CDC's Zika Pregnancy Registry by NYSDOH.
    - NYCDOHMH directly reports pregnant women with laboratory evidence of possible Zika virus infection who reside within NYC to the Zika Pregnancy Registry.
  - No cases of LMBT have been identified.
- CHKV, DENV, and Malaria:[4]
  - 4 human cases of CHIK infection have been reported to NYSDOH, all of which were travel-associated. No cases of LMBT have been identified.
  - 30 human cases of DENV infection have been reported to NYSDOH, all of which were travel-associated. No cases of LMBT have been identified.
  - 47 human cases of Malaria infection have been reported to NYSDOH, all of which were travel-associated. No cases of LMBT have been identified.

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[1] Presumptive 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] Travel-associated cases are defined by recent travel to a country or region with known active ZIKV transmission OR sexual contact with a recent traveler from these areas.

[3] CDC criteria for reporting pregnant women with laboratory evidence of possible Zika virus infection differ from that used to report actual cases of ZIKV. Additional information can be found at http://www.cdc.gov/zika/hc-providers/registry.html, http://www.cdc.gov/mmwr/volumes/65/wr/mm6521e1.htm?s_cid=mm6521e1_w, and https://wwwn.cdc.gov/nndss/conditions/zika-virus-disease-and-zika-virus-congenital-infection/case-definition/2016/.

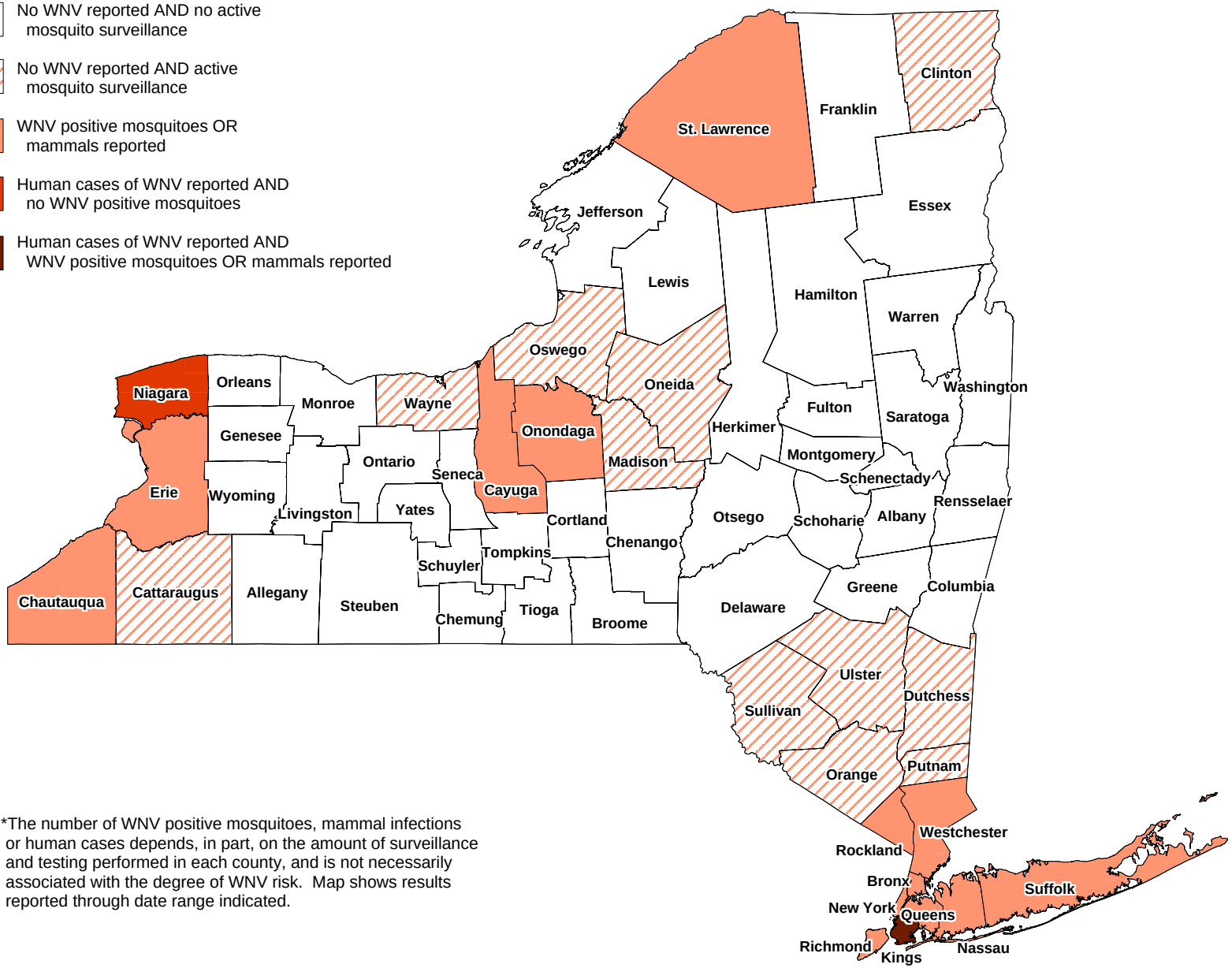
[4] Local, mosquito-borne transmission is defined by the absence of the following epidemiological risk factors: recent travel to a country or region with known active ZIKV transmission OR sexual contact with a recent traveler from these areas; recent blood transfusion; recent laboratory exposure to ZIKV;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

[5] NYCDOHMH directly reports human cases of CHKV, DENV and malaria infection to CDC.

2016 West Nile Virus Surveillance Summary

Positive Test Results* (1/1/2016 - 9/10/2016)

- No WNV reported AND no active mosquito surveillance
- No WNV reported AND active mosquito surveillance
- WNV positive mosquitoes OR mammals reported
- Human cases of WNV reported AND no WNV positive mosquitoes
- Human cases of WNV reported AND WNV positive mosquitoes OR mammals reported



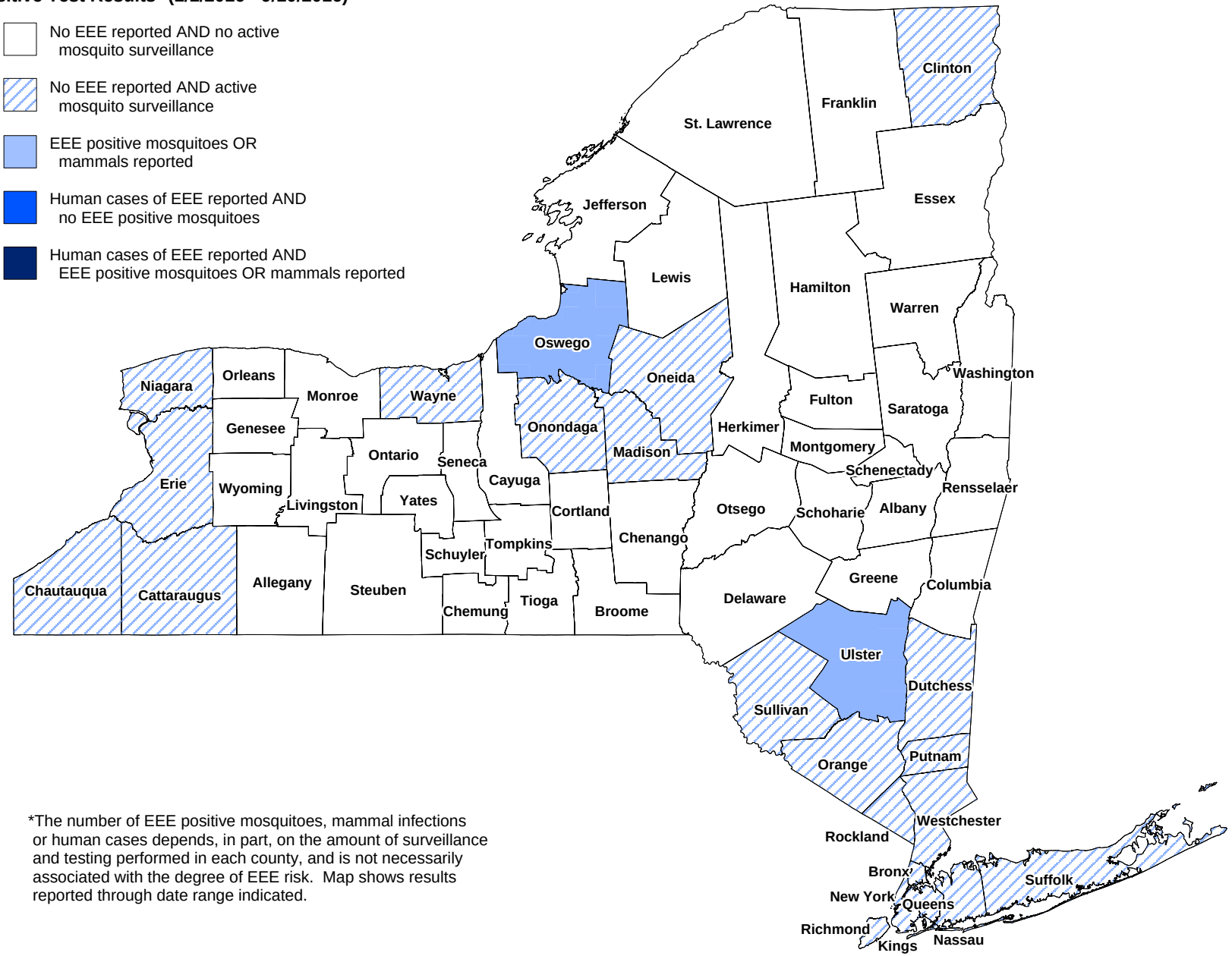
*The number of WNV positive mosquitoes, mammal infections or human cases depends, in part, on the amount of surveillance and testing performed in each county, and is not necessarily associated with the degree of WNV risk. Map shows results reported through date range indicated.

NYSDOH BCDC - 9/10/2016

2016 Eastern Equine Encephalitis Virus Surveillance Summary

Positive Test Results* (1/1/2016 - 9/10/2016)

- No EEE reported AND no active mosquito surveillance
- No EEE reported AND active mosquito surveillance
- EEE positive mosquitoes OR mammals reported
- Human cases of EEE reported AND no EEE positive mosquitoes
- Human cases of EEE reported AND EEE positive mosquitoes OR mammals reported

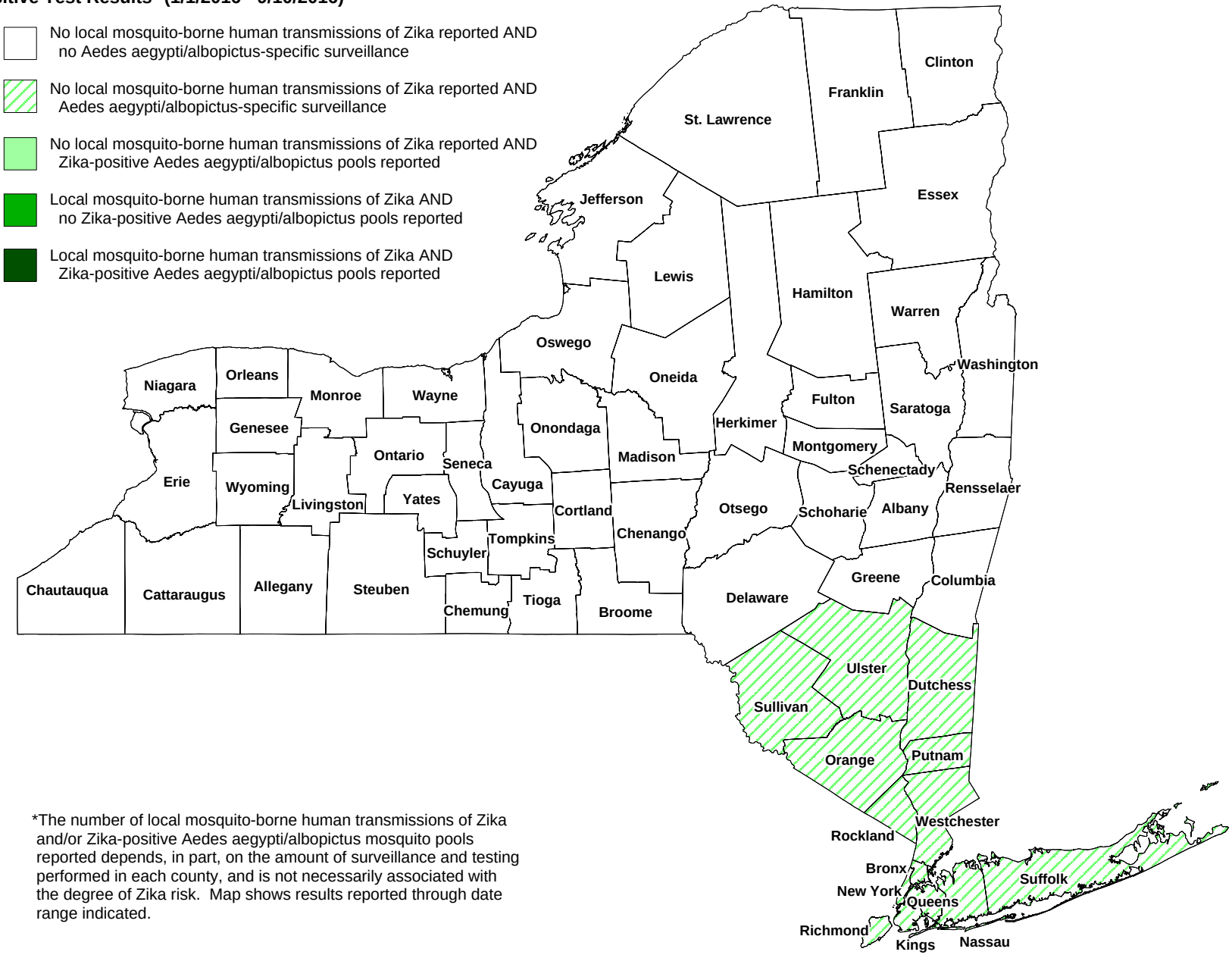


*The number of EEE positive mosquitoes, mammal infections or human cases depends, in part, on the amount of surveillance and testing performed in each county, and is not necessarily associated with the degree of EEE risk. Map shows results reported through date range indicated.

2016 Zika Virus Surveillance Summary

Positive Test Results* (1/1/2016 - 9/10/2016)

- No local mosquito-borne human transmissions of Zika reported AND no Aedes aegypti/albopictus-specific surveillance
- No local mosquito-borne human transmissions of Zika reported AND Aedes aegypti/albopictus-specific surveillance
- No local mosquito-borne human transmissions of Zika reported AND Zika-positive Aedes aegypti/albopictus pools reported
- Local mosquito-borne human transmissions of Zika AND no Zika-positive Aedes aegypti/albopictus pools reported
- Local mosquito-borne human transmissions of Zika AND Zika-positive Aedes aegypti/albopictus pools reported

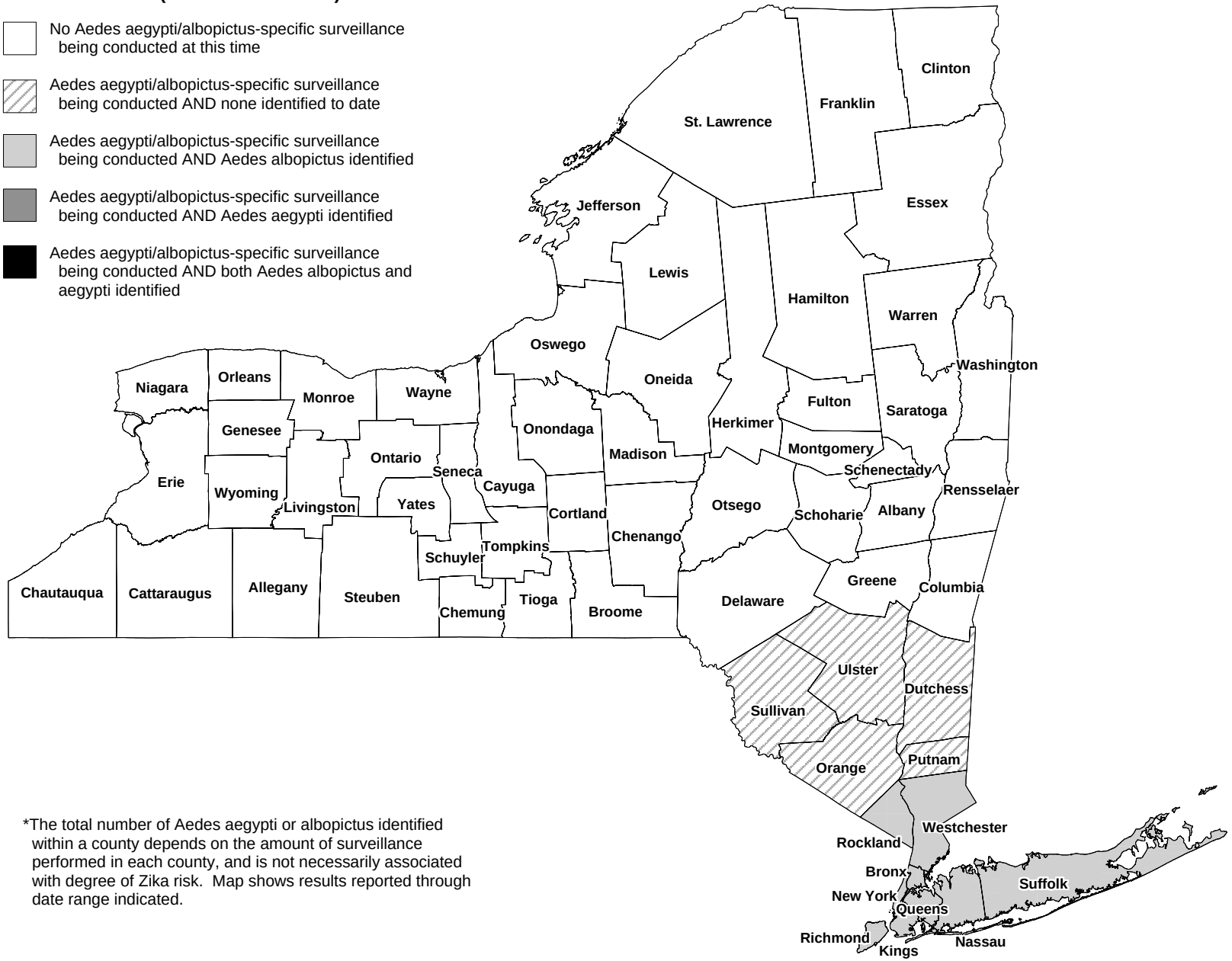


*The number of local mosquito-borne human transmissions of Zika and/or Zika-positive Aedes aegypti/albopictus mosquito pools reported depends, in part, on the amount of surveillance and testing performed in each county, and is not necessarily associated with the degree of Zika risk. Map shows results reported through date range indicated.

2016 Aedes aegypti/albopictus Surveillance Summary

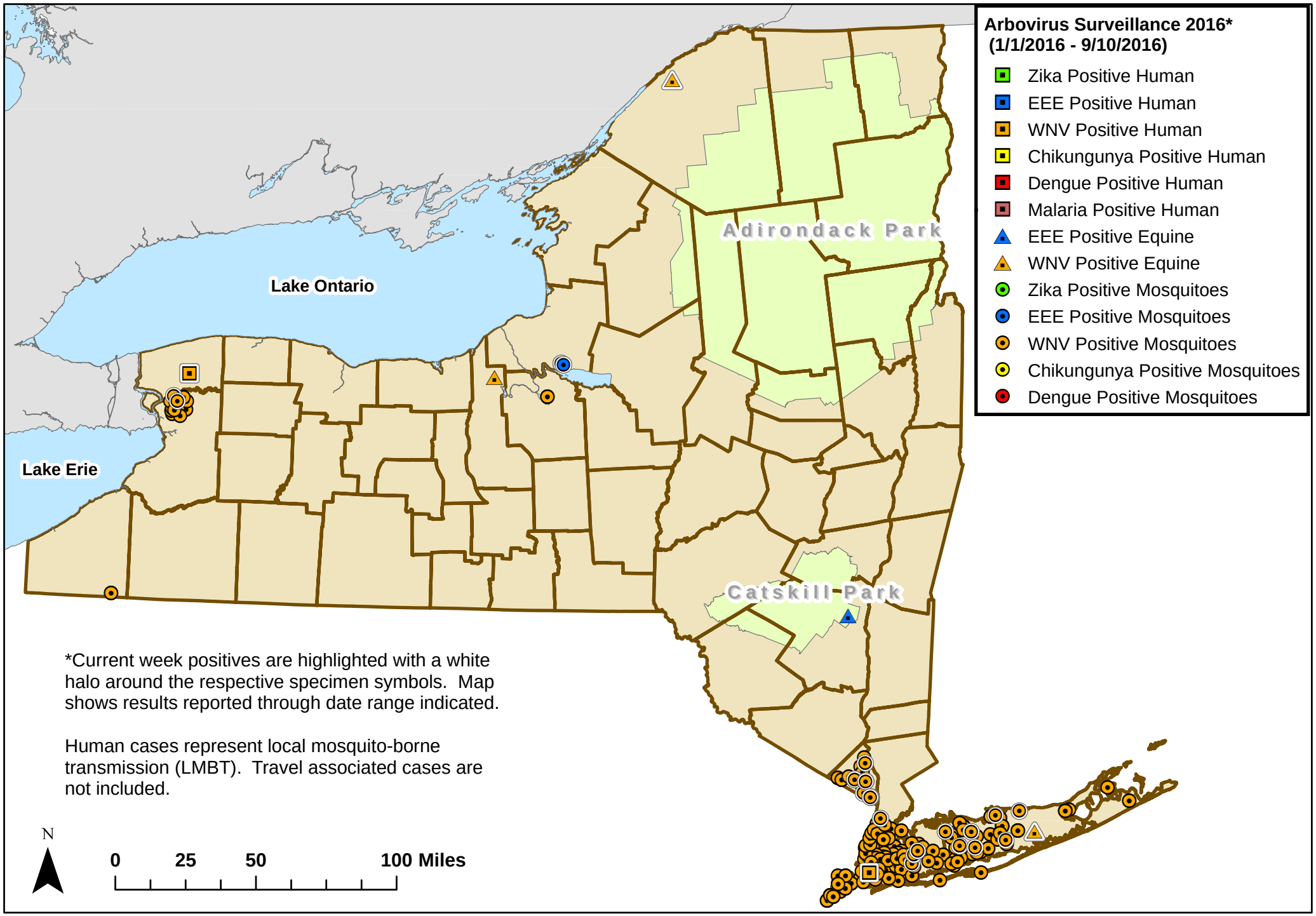
Surveillance Results* (1/1/2016 - 9/10/2016)

- No Aedes aegypti/albopictus-specific surveillance being conducted at this time
- Aedes aegypti/albopictus-specific surveillance being conducted AND none identified to date
- Aedes aegypti/albopictus-specific surveillance being conducted AND Aedes albopictus identified
- Aedes aegypti/albopictus-specific surveillance being conducted AND Aedes aegypti identified
- Aedes aegypti/albopictus-specific surveillance being conducted AND both Aedes albopictus and aegypti identified



*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.

2016 Mosquito-borne Illness Surveillance



*Current week positives are highlighted with a white halo around the respective specimen symbols. Map shows results reported through date range indicated.

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

NYSDOH, BCDC - September 10, 2016

New York State Arboviral Surveillance Summary
1/1/16-9/10/16

Jurisdiction	Eastern Equine Encephalitis			West Nile		
	Cases		Postive Mosquito Pools	Cases		Positive Mosquito Pools
	Human	Equine		Human	Equine	
ALBANY	0	0	--	0	0	--
ALLEGANY	0	0	--	0	0	--
BROOME	0	0	--	0	0	--
CATTARAUGUS*	0	0	0	0	0	0
CAYUGA	0	0	--	0	1	--
CHAUTAUQUA*	0	0	0	0	0	2
CHEMUNG	0	0	--	0	0	--
CHENANGO	0	0	--	0	0	--
CLINTON*	0	0	0	0	0	0
COLUMBIA	0	0	--	0	0	--
CORTLAND	0	0	--	0	0	--
DELAWARE	0	0	--	0	0	--
DUTCHESS*	0	0	0	0	0	0
ERIE*	0	0	0	0	0	31
ESSEX	0	0	--	0	0	--
FRANKLIN	0	0	--	0	0	--
FULTON	0	0	--	0	0	--
GENESEE	0	0	--	0	0	--
GREENE	0	0	--	0	0	--
HAMILTON	0	0	--	0	0	--
HERKIMER	0	0	--	0	0	--
JEFFERSON	0	0	--	0	0	--
LEWIS	0	0	--	0	0	--
LIVINGSTON	0	0	--	0	0	--
MADISON*	0	0	0	0	0	0
MONROE	0	0	--	0	0	--
MONTGOMERY	0	0	--	0	0	--
NASSAU*	0	0	0	0	0	18
NIAGARA*	0	0	0	0	0	0
ONEIDA*	0	0	0	0	0	0
ONONDAGA*	0	0	0	0	0	3
ONTARIO	0	0	--	0	0	--
ORANGE*	0	0	0	0	0	0
ORLEANS	0	0	--	0	0	--
OSWEGO*	0	0	5	0	0	0
OTSEGO	0	0	--	0	0	--
PUTNAM*	0	0	0	0	0	0
RENSSELAER	0	0	--	0	0	--
ROCKLAND*	0	0	0	0	0	33
ST LAWRENCE	0	0	--	0	1	--
SARATOGA	0	0	--	0	0	--
SCHENECTADY	0	0	--	0	0	--
SCHOHARIE	0	0	--	0	0	--
SCHUYLER	0	0	--	0	0	--
SENECA	0	0	--	0	0	--
STEUBEN	0	0	--	0	0	--
SUFFOLK*	0	0	0	0	1	132
SULLIVAN*	0	0	0	0	0	0
TIOGA	0	0	--	0	0	--
TOMPKINS	0	0	--	0	0	--
ULSTER*	0	1	0	0	0	0
WARREN	0	0	--	0	0	--
WASHINGTON	0	0	--	0	0	--
WAYNE*	0	0	0	0	0	0
WESTCHESTER*	0	0	0	0	0	3
WYOMING	0	0	--	0	0	--
YATES	0	0	--	0	0	--
NYS (excluding NYC) TOTAL	0	1	5	0	3	222
NYC* TOTAL	0	0	0	1	0	225
NYS TOTAL	0	1	5	1	3	447

* County/area conducting mosquito surveillance.

New York State Arboviral Surveillance Summary
1/1/16-9/10/16

Jurisdiction	Zika		
	Human Cases		Positive Mosquito Pools
	Travel associated	LMBT**	
ALBANY	4	0	--
ALLEGANY	0	0	--
BROOME	3	0	--
CATTARAUGUS*	0	0	0
CAYUGA	0	0	--
CHAUTAUQUA*	0	0	0
CHEMUNG	0	0	--
CHENANGO	0	0	--
CLINTON*	2	0	0
COLUMBIA	1	0	--
CORTLAND	0	0	--
DELAWARE	1	0	--
DUTCHESS*	5	0	0
ERIE*	4	0	0
ESSEX	0	0	--
FRANKLIN	0	0	--
FULTON	0	0	--
GENESEE	0	0	--
GREENE	0	0	--
HAMILTON	0	0	--
HERKIMER	0	0	--
JEFFERSON	1	0	--
LEWIS	1	0	--
LIVINGSTON	0	0	--
MADISON*	0	0	0
MONROE	15	0	--
MONTGOMERY	0	0	--
NASSAU*	44	0	0
NIAGARA*	1	0	0
ONEIDA*	3	0	0
ONONDAGA*	7	0	0
ONTARIO	3	0	--
ORANGE*	7	0	0
ORLEANS	0	0	--
OSWEGO*	0	0	0
OTSEGO	1	0	--
PUTNAM*	1	0	0
RENSSELAER	0	0	--
ROCKLAND*	8	0	0
ST LAWRENCE	1	0	--
SARATOGA	2	0	--
SCHENECTADY	1	0	--
SCHOHARIE	0	0	--
SCHUYLER	0	0	--
SENECA	0	0	--
STEUBEN	0	0	--
SUFFOLK*	45	0	0
SULLIVAN*	0	0	0
TIOGA	0	0	--
TOMPKINS	2	0	--
ULSTER*	0	0	0
WARREN	0	0	--
WASHINGTON	0	0	--
WAYNE*	2	0	0
WESTCHESTER*	21	0	0
WYOMING	0	0	--
YATES	0	0	--
NYS (excluding NYC) TOTAL	186	0	0
NYC* TOTAL	563	0	0
NYS TOTAL	749	0	0

* Jurisdiction conducting mosquito surveillance.
**Local mosquito-borne transmission.

New York State Arboviral Surveillance Summary
1/1/16-9/10/16

Jurisdiction	Chikungunya			Dengue			Malaria		
	Human Cases		Postive Mosquito Pools	Human Cases		Positive Mosquito Pools	Human Cases		Positive Mosquito Pools
	Travel associated	LMBT**		Travel associated	LMBT**		Travel associated	LMBT**	
ALBANY	0	0	--	0	0	--	4	0	--
ALLEGANY	0	0	--	0	0	--	0	0	--
BROOME	0	0	--	0	0	--	3	0	--
CATTARAUGUS*	0	0	0	0	0	0	1	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	--	1	0	--
CORTLAND	0	0	--	0	0	--	0	0	--
DELAWARE	0	0	--	0	0	--	0	0	--
DUTCHESS*	0	0	0	3	0	0	2	0	0
ERIE*	0	0	0	0	0	0	3	0	0
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	--
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	--	1	0	--	0	0	--
LIVINGSTON	0	0	--	0	0	--	0	0	--
MADISON*	0	0	0	1	0	0	1	0	0
MONROE	0	0	--	1	0	--	7	0	--
MONTGOMERY	0	0	--	0	0	--	0	0	--
NASSAU*	0	0	0	6	0	0	6	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	1	0	0
ONTARIO	0	0	--	0	0	--	0	0	--
ORANGE*	0	0	0	1	0	0	1	0	0
ORLEANS	0	0	--	0	0	--	0	0	--
OSWEGO*	0	0	0	0	0	0	0	0	0
OTSEGO	0	0	--	0	0	--	1	0	--
PUTNAM*	0	0	0	0	0	0	0	0	0
RENSSELAER	0	0	--	0	0	--	0	0	--
ROCKLAND*	1	0	0	2	0	0	1	0	0
ST LAWRENCE	0	0	--	0	0	--	1	0	--
SARATOGA	0	0	--	0	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	1	0	0	5	0	0
SULLIVAN*	0	0	0	0	0	0	0	0	0
TIOGA	0	0	--	0	0	--	0	0	--
TOMPKINS	0	0	--	0	0	--	1	0	--
ULSTER*	0	0	0	0	0	0	1	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*	2	0	0	12	0	0	6	0	0
WYOMING	0	0	--	0	0	--	0	0	--
YATES	0	0	--	0	0	--	0	0	--
NYS (excluding NYC) TOTAL	4	0	0	30	0	0	47	0	0
NYC*† TOTAL	--	0	--	--	0	0	--	0	--
NYS TOTAL	4	0	0	30	0	0	47	0	0

*Jurisdiction conducting mosquito surveillance.
**Local mosquito-borne transmission.
†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 http://diseasemaps.usgs.gov/mapviewer/.

- 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/.