

NYSDOH STATEWIDE MOSQUITO-BORNE DISEASE ACTIVITY REPORT October 24, 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 17 through October 22:

- <u>West Nile Virus (WNV):</u>
 - o 0 WNV-positive mosquito pools were identified.
 - o 2 human cases of WNV infection were reported. (Nassau 1, Suffolk 1)
 - 1 equine case of WNV infection was reported. (Cattaraugus 1)
 - 0 WNV presumptive viremic donors were reported to the Centers for Disease Control and Prevention (CDC).¹
- Eastern Equine Encephalitis Virus (EEEv):
 - o 0 EEEv-positive mosquito pools were identified.
 - o 0 human cases of EEEv infection were reported.
 - o 1 equine case of EEEv infection was reported. (Oswego 1)
 - 0 caprine cases of EEEv infection were reported.²
 - 0 ratite cases of EEEv infection were reported.³
- <u>Zika Virus (ZIKV)</u>:
 - 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.
 - $\circ~$ 0 human cases were 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 (Greene 1) was reported to NYSDOH. No cases of LMBT were identified.
 - 0 human cases of DENV infection were reported to NYSDOH. No cases of LMBT were identified.
 - 2 human cases of Malaria infection (Oneida 1, Suffolk 1) were reported to NYSDOH. No cases of LMBT were identified.

Year to date:

- <u>WNV:</u>
 - 571 WNV-positive mosquito pools have been identified.
 - o 13 human cases of WNV infection have been reported.
 - o 1 equine case of WNV infection has been reported.
 - 1 WNV presumptive viremic donor has been reported to CDC.

• <u>EEEv:</u>

- \circ $\,$ 66 EEEv-positive mosquito pools have been identified.
- 0 human cases of EEEv infection have been reported.
- o 8 equine cases of EEEv infection have been reported.
- 1 caprine case of EEEv infection has been reported.
- o 1 ratite case of EEEv infection has been reported.
- <u>ZIKV</u>:
 - 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.
 - o 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:
 - 4 human cases of CHIKV infection have been reported to NYSDOH. No cases of LMBT have been identified.
 - $\circ~$ 25 human cases of DENV infection have been reported to NYSDOH. No cases of LMBT have been identified.
 - $\circ~$ 40 human cases of Malaria infection have been reported to NYSDOH. No cases of LMBT have been identified.

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.

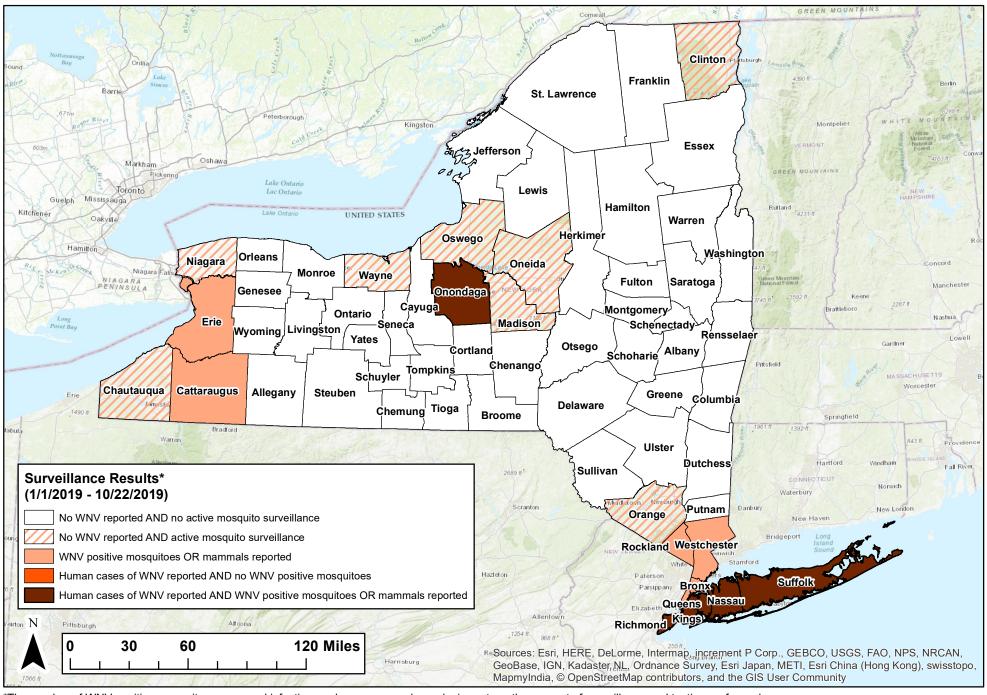
²Caprine – of, relating to, or being a goat.

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.

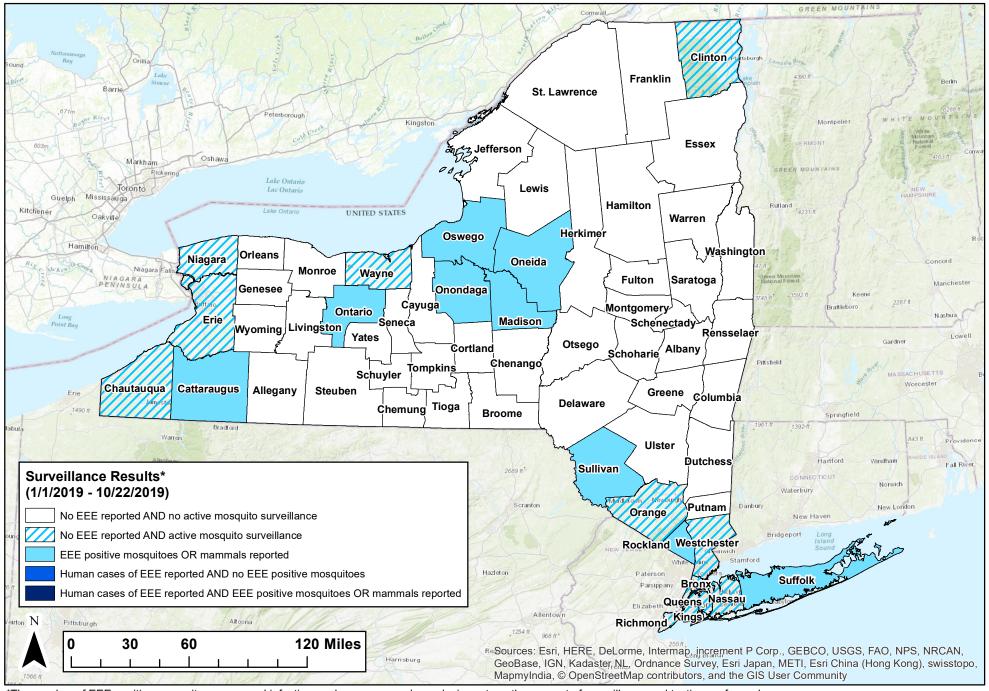
2019 West Nile Virus Surveillance Summary



*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.

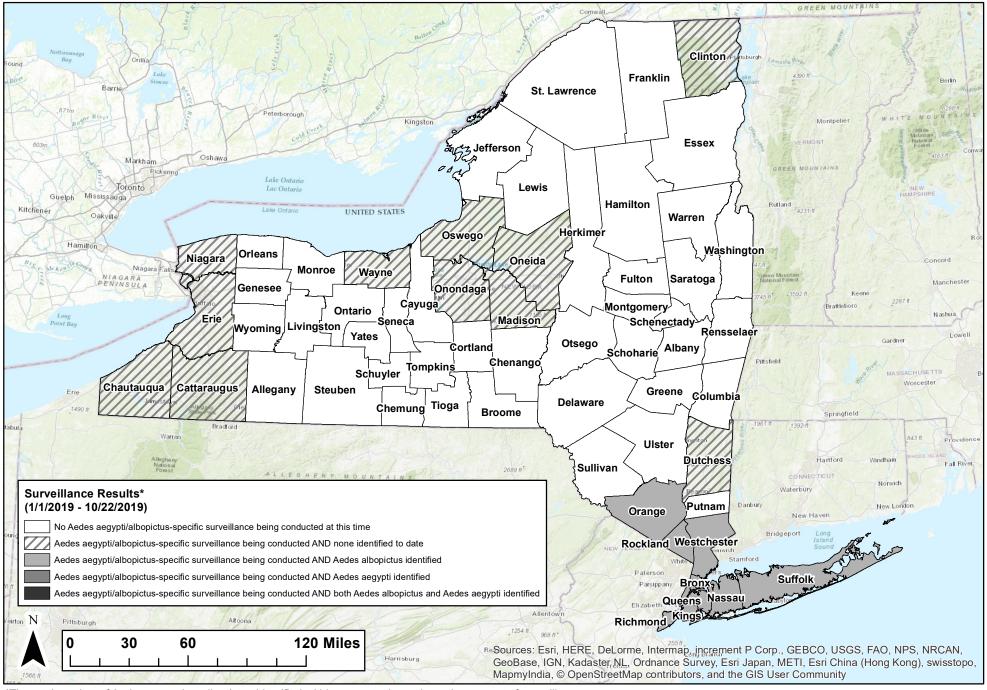
2019 Eastern Equine Encephalitis Virus Surveillance Summary



*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.

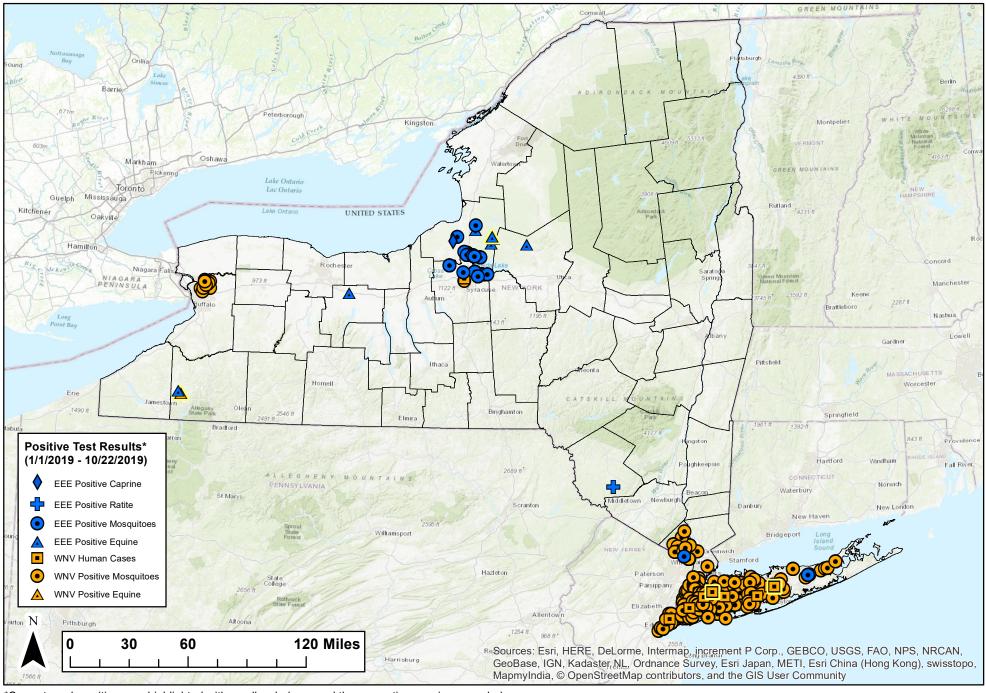
2019 Aedes aegypti/albopictus Surveillance Summary



*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.

- -- 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 1/1/19-10/22/19

Jurisdiction			West Nile						
	Eastern Equine Er 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	1	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		
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		
	0	0	-	-	2	-	-	0	
MONROE	0	0	0	0		0	0		
MONTGOMERY	0	0	0	0		0	0		
NASSAU*	0	0	0	0	0	2	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	5	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		0	0		
SCHENECTADY	0	0	0	0		0	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*	0	0	0	0	9	3	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		
WARREN	0	0	0	0		0	0		
WASHINGTON WAYNE*			-			-	-		
	0	0	0	0	0	0	0	0	
WESTCHESTER*	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	8	1	1	66	6	1	165	
NYC* TOTAL NYS TOTAL	0	0	0	0	0	7	0	406	
NIVS TOTAL	0	8	1	1	66	13	1	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 1/1/19-10/22/19

	Zika							
	Human Ca	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					
	0	0						
CORTLAND	0	0						
DELAWARE	0	0						
DUTCHESS*	0	0	0					
ERIE*	0	0	0					
ESSEX FRANKLIN	0	0						
	0	0						
FULTON GENESEE	0	0						
GENESEE	0	0						
HAMILTON	0	0						
HERKIMER	0	0						
JEFFERSON	0	0						
LEWIS	0	0						
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	0	0	0					
WARREN WASHINGTON	0	0						
WASHINGTON WAYNE*	0	0						
WAYNE" WESTCHESTER*	0	0	0					
WESTCHESTER" WYOMING	0	0						
YATES	0	0						
NYS (excluding NYC) TOTAL	6	0	0					
NYC*† TOTAL								
NYS TOTAL	6	0	0					

* Jurisdiction conducting mosquito surveillance. **Local mosquito-borne transmission. [†]NYCDOHMH directly reports human cases of ZIKv infection to CDC.

New York State Arboviral Surveillance Summary 1/1/19-10/22/19

		Chikunguny	/a	Dengue			Malaria			
	Humar	n Cases	Positive	Human	Cases	Positive	Human Cases		Positive	
Jurisdiction	Travel associated	LMBT**	Mosquito Pools	Travel associated	LMBT**	Mosquito Pools	Travel associated	LMBT**	Mosquito Pools	
ALBANY	0	0		1	0		associated	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	0	0		0	0		0	0		
GENESEE	0	0		0	0		0	0		
GREENE	1	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	1	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	3	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		
YATES	0	0		0	0		0	0		
	4	0	0	25	0	0	40	0	0	
NYS (excluding NYC) TOTAL	4	0	0	20	0	•	10		0	
NYS (excluding NYC) TOTAL NYC* ⁺ TOTAL	4	0			0	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 https://wwwn.cdc.gov/arbonet/Maps/ADB_Diseases_Map/index.html

- Specific information about WNV, including statistics and maps, can be found at <u>http://www.cdc.gov/westnile/</u>.
- Specific information about EEEv, including statistics and maps, can be found at <u>http://www.cdc.gov/EasternEquineEncephalitis</u>.
- 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 <u>http://www.cdc.gov/chikungunya/.</u>
- Specific information about dengue fever, including statistics and maps, can be found at can be at <u>http://www.cdc.gov/dengue/</u>.
- Specific information about malaria, including statistics and maps, can be found here at <u>http://www.cdc.gov/malaria/</u>.