

Vectorborne Surveillance in Ohio August 1, 2019

This update provides detailed mosquito and tick surveillance information not included in the **Ohio Vectorborne Surveillance Update**.



Mosquito Surveillance

Here is a summary of mosquitoes identified and tested for West Nile virus (WNV) to date. For each jurisdiction, the table reports the total number of mosquitoes identified in traps, the number of resulting pooled samples tested or pending (up to 50 mosquitoes per sample), and those positive for WNV. The table shows only the mosquitoes that have been identified and processed as of noon on 08/01/2019:

2019* Mosquitoes Submitted to ODH ZDP for Arbovirus Testing						
Counties (66 total)	Agencies (77 total)	# Mosquitoes Submitted	# <i>Culex</i> spp. Pooled	# Pooled Samples Pending	# Pooled Samples Reported	# WNV+ Samples
Adams	Adams County Health Department (w/ODH)	1,294	1,157	0	31	0
Ashland	Ashland County-City Health Department	249	71	0	13	0
Ashtabula	Ashtabula City Health Department	171	135	0	7	0
	Ashtabula County Health Department	127	124	0	4	0
Athens	Athens City-County Health Department	4,116	3,649	13	111	1
Auglaize	Auglaize County Health Department (w/ODH)	1,628	1,327	21	21	0
Brown	Brown County Health Department (w/ODH)	1,215	960	0	27	0
Butler	Butler County Health Department	1,535	1,423	11	41	1
Champaign	Champaign Health District	20	6	2	3	0
Clark	Clark County Combined Health District	3,800	3,101	0	113	2
Clermont	Clermont County Public Health	1,844	1,667	15	46	0
Clinton	Clinton County Health District (w/ODH)	1,867	992	0	35	0
Columbiana	Columbiana County Health District	213	131	0	19	0
Coshocton	Coshocton County Health Department	575	480	0	12	0
Crawford	Galion City Health Department	991	917	13	16	0
Cuyahoga	Cuyahoga County Board of Health	4,539	3,492	24	104	0
Darke	Darke County General Health District	333	30	2	9	0
Defiance	Defiance County General Health District (w/ODH)	1,202	933	13	16	0

2019* Mosquitoes Submitted to ODH ZDP for Arbovirus Testing

Counties (66 total)	Agencies (77 total)	# Mosquitoes Submitted	# Culex spp. Pooled	# Pooled Samples Pending	# Pooled Samples Reported	# WNV+ Samples
Delaware	Delaware General Health District	1,653	897	14	108	0
Erie	Erie County Health Department (w/ODH)	1,303	976	0	34	0
Fairfield	Fairfield Department of Health	264	159	0	20	0
	Franklin County Public Health	843	644	0	21	0
Fayette	Fayette County Health Department	8	2	0	2	0
Franklin	Columbus Public Health	19,710	19,633	50	456	12
	Franklin County Public Health	48,862	42,603	3	1,108	5
Fulton	Fulton County Health Department (w/ODH)	557	438	8	10	0
Geauga	Geauga County Health District	675	513	0	13	0
Greene	Greene County Public Health	205	169	5	5	0
Hamilton	Cincinnati Health Department	1,243	1,024	16	36	0
	Hamilton County Public Health	5,342	4,354	37	124	1
	Springdale Health Department	1,732	1,326	7	81	0
Hancock	Hancock Public Health	8,466	7,833	27	193	0
Hardin	Kenton-Hardin Health Department (w/ODH)	1,786	1,216	17	24	0
Highland	Highland County Health Department (w/ODH)	834	575	0	21	0
Hocking	Hocking County Health Department	2,419	1,499	17	118	0
Jackson	Jackson County Health Department	563	548	0	15	0
Knox	Knox County Health Department	2,660	2,178	4	65	0
Lake	Lake County General Health District	5,784	4,888	0	160	0
Lawrence	Lawrence County Health Department	30	6	0	1	0
Licking	Licking County Health Department	11,961	11,401	0	312	0
Logan	Logan County Health District (w/ODH)	528	403	0	18	0
Lorain	Lorain County Public Health	16,228	14,963	61	286	0
Lucas	Toledo Area Sanitary District	22,492	22,415	95	708	3
Madison	Madison County Public Health	9	7	0	2	0
Mahoning	Mahoning County District Board of Health	259	193	0	18	0
	Youngstown City Health District	148	114	0	11	2
Medina	Medina County Health Department	3,357	3,056	12	85	1
Meigs	Meigs County Health Department	418	156	0	37	0
Miami	Miami County Public Health	857	519	11	40	0
Montgomery	Public Health - Dayton & Montgomery County	1,497	1,398	0	40	0

2019* Mosquitoes Submitted to ODH ZDP for Arbovirus Testing						
Counties (66 total)	Agencies (77 total)	# Mosquitoes Submitted	# Culex spp. Pooled	# Pooled Samples Pending	# Pooled Samples Reported	# WNV+ Samples
Morrow	Morrow County Health District (w/ODH)	319	44	0	6	0
Muskingum	Zanesville-Muskingum County Health Department	244	182	4	7	0
Paulding	Paulding County Health Department (w/ODH)	1,550	1,033	10	27	0
Perry	Perry County General Health District	30	14	0	4	0
Pickaway	Pickaway County General Health District	3,358	2,931	17	100	0
Pike	Pike County General Health District	243	130	7	3	0
Portage	Kent City Health Department	25,848	20,027	14	549	0
	Portage County Health District	9,210	8,381	30	239	0
Richland	Richland Public Health	8,914	7,147	0	195	0
	Shelby City Health Department	1,030	969	13	16	0
Ross	Ross County Health District	7,949	7,615	0	200	1
Sandusky	Sandusky County Health Department (w/ODH)	695	377	0	21	0
Scioto	Portsmouth City Health Department	799	333	8	33	0
	Scioto County Health Department	1,385	1,079	0	57	1
Shelby	City of Sidney	425	6	0	4	0
Stark	Canton City Public Health	1,974	1,348	0	137	0
	Stark County Health Department	6,708	6,192	0	192	0
Summit	Barberton-Norton Mosquito Abatement District	18,496	14,295	0	539	0
	Summit County Public Health	41,714	39,555	23	1,011	3
Trumbull	Trumbull County Combined Health District	73	60	0	8	0
Tuscarawas	New Philadelphia City Health Department	252	156	5	9	0
	Tuscarawas County Health Department	4,166	3,710	0	116	0
Union	Union County Health Department	3,315	2,723	8	73	1
Van Wert	Van Wert County General Health District (w/ODH)	1,182	918	16	14	0
Vinton	Vinton County Health Department	787	717	15	15	0
Warren	Warren County Health District	2,251	2,078	0	48	0
Wood	Bowling Green State University	2,359	659	15	52	0
Wyandot	Wyandot County Public Health	209	183	0	7	0
Totals:		333,897	289,563	683	8,482	34

*Updated 7/31/19

Here is a breakdown by mosquito species identified:

Mosquito Species Identified	
Species	#
<i>Aedes albopictus</i>	909
<i>Aedes atropalpus</i>	19
<i>Aedes aurifer</i>	173
<i>Aedes canadensis</i>	255
<i>Aedes cantator</i>	587
<i>Aedes cinereus</i>	286
<i>Aedes communis</i>	3
<i>Aedes dorsalis</i>	1
<i>Aedes grossbecki</i>	24
<i>Aedes hendersoni</i>	4
<i>Aedes implicatus</i>	11
<i>Aedes japonicus</i>	17,020
<i>Aedes provocans</i>	3
<i>Aedes sollicitans</i>	85
<i>Aedes sp.</i>	745
<i>Aedes spencerii</i>	1
<i>Aedes sticticus</i>	530
<i>Aedes stimulans</i>	720
<i>Aedes triseriatus</i>	1,399
<i>Aedes trivittatus</i>	2,711
<i>Aedes vexans</i>	4,772
<i>Anopheles barberi</i>	68
<i>Anopheles perplexens</i>	2
<i>Anopheles punctipennis</i>	2,113
<i>Anopheles quadrimaculatus</i>	418
<i>Anopheles sp.</i>	11
<i>Anopheles walkeri</i>	18
<i>Coquillettidia perturbans</i>	1,273
<i>Culex sp.</i>	298,816
<i>Culiseta impatiens</i>	2
<i>Culiseta inornata</i>	215
<i>Culiseta minnesotae</i>	1
<i>Culiseta sp.</i>	17
<i>Orthopodomyia alba</i>	1
<i>Orthopodomyia signifera</i>	70
<i>Psorophora ciliata</i>	32

Mosquito Species Identified	
Species	#
<i>Psorophora columbiae</i>	303
<i>Psorophora cyanescens</i>	5
<i>Psorophora discolor</i>	31
<i>Psorophora ferox</i>	141
<i>Psorophora horrida</i>	8
<i>Psorophora sp.</i>	4
<i>Toxorhynchites sp.</i>	2
<i>Uranotaenia sapphirina</i>	86
<i>Wyeomyia smithii</i>	2
Total:	333,897

Here is the breakdown of *Ae. albopictus* collections by agency:

Breakdown of <i>Aedes albopictus</i> Mosquitoes Identified		
County	Agency	#
Adams	Adams County Health Department (w/ODH)	58
Ashland	Ashland County-City Health Department	26
Athens	Athens City-County Health Department	41
Brown	Brown County Health Department (w/ODH)	60
Butler	Butler County Health Department	2
Clark	Clark County Combined Health District	3
Clermont	Clermont County Public Health	5
Clinton	Clinton County Health District (w/ODH)	15
Darke	Darke County General Health District	2
Delaware	Delaware General Health District	2
Fairfield	Fairfield Department of Health	11
Franklin	Columbus Public Health	1
	Franklin County Public Health	38
Greene	Greene County Public Health	2
Hamilton	Cincinnati Health Department	65
	Hamilton County Public Health	111
	Springdale Health Department	67
Hancock	Hancock Public Health	1
Highland	Highland County Health Department (w/ODH)	14
Hocking	Hocking County Health Department	58
Lake	Lake County General Health District	2
Lawrence	Lawrence County Health Department	1

Breakdown of <i>Aedes albopictus</i> Mosquitoes Identified		
County	Agency	#
Licking	Licking County Health Department	2
Lorain	Lorain County Public Health	1
Meigs	Meigs County Health Department	41
Miami	Miami County Public Health	4
Montgomery	Public Health - Dayton & Montgomery County	1
Muskingum	Zanesville-Muskingum County Health Department	2
Pickaway	Pickaway County General Health District	25
Pike	Pike County General Health District	50
Portage	Portage County Health District	1
Ross	Ross County Health District	49
Scioto	Portsmouth City Health Department	68
	Scioto County Health Department	60
Stark	Canton City Public Health	13
Vinton	Vinton County Health Department	2
Warren	Warren County Health District	5
Total:		909

Here is the breakdown of *Ae. triseriatus* collections by agency:

Breakdown of <i>Aedes triseriatus</i> Mosquitoes Identified		
County	Agency	#
Adams	Adams County Health Department (w/ODH)	8
Ashland	Ashland County-City Health Department	2
Athens	Athens City-County Health Department	25
Auglaize	Auglaize County Health Department (w/ODH)	19
Brown	Brown County Health Department (w/ODH)	4
Butler	Butler County Health Department	3
Champaign	Champaign Health District	1
Clark	Clark County Combined Health District	2
Clermont	Clermont County Public Health	8
Clinton	Clinton County Health District (w/ODH)	2
Columbiana	Columbiana County Health District	3
Coshocton	Coshocton County Health Department	1
Crawford	Galion City Health Department	3
Cuyahoga	Cuyahoga County Board of Health	29
Darke	Darke County General Health District	1
Defiance	Defiance County General Health District (w/ODH)	34

Breakdown of *Aedes triseriatus* Mosquitoes Identified

County	Agency	#
Delaware	Delaware General Health District	34
Erie	Erie County Health Department (w/ODH)	3
Fairfield	Fairfield Department of Health	6
Franklin	Columbus Public Health	2
	Franklin County Public Health	50
Fulton	Fulton County Health Department (w/ODH)	2
Geauga	Geauga County Health District	21
Hamilton	Cincinnati Health Department	12
	Hamilton County Public Health	31
	Springdale Health Department	89
Hancock	Hancock Public Health	37
Hardin	Kenton-Hardin Health Department (w/ODH)	3
Highland	Highland County Health Department (w/ODH)	4
Hocking	Hocking County Health Department	14
Knox	Knox County Health Department	9
Lake	Lake County General Health District	8
Licking	Licking County Health Department	10
Logan	Logan County Health District (w/ODH)	5
Lorain	Lorain County Public Health	48
Mahoning	Mahoning County District Board of Health	1
	Youngstown City Health District	1
Medina	Medina County Health Department	8
Meigs	Meigs County Health Department	18
Miami	Miami County Public Health	1
Muskingum	Zanesville-Muskingum County Health Department	2
Paulding	Paulding County Health Department (w/ODH)	9
Perry	Perry County General Health District	3
Pickaway	Pickaway County General Health District	14
Pike	Pike County General Health District	5
Portage	Kent City Health Department	50
	Portage County Health District	95
Richland	Richland Public Health	164
	Shelby City Health Department	1
Ross	Ross County Health District	16
Sandusky	Sandusky County Health Department (w/ODH)	3
Scioto	Portsmouth City Health Department	15
	Scioto County Health Department	14
Shelby	City of Sidney	2

Breakdown of *Aedes triseriatus* Mosquitoes Identified

County	Agency	#
Stark	Canton City Public Health	10
	Stark County Health Department	4
Summit	Barberton-Norton Mosquito Abatement District	83
	Summit County Public Health	209
Tuscarawas	New Philadelphia City Health Department	9
	Tuscarawas County Health Department	82
Union	Union County Health Department	6
Van Wert	Van Wert County General Health District (w/ODH)	7
Warren	Warren County Health District	7
Wood	Bowling Green State University	27
Total:		1,399



Tick Surveillance

Here is a breakdown by tick species identified:

2019* Tick Species Identified by ODH ZDP				
Species	Life Stage			Totals
	Adult Female	Adult Male	Nymph	
<i>Amblyomma americanum</i> (Lone Star tick)	21	15	44	80
<i>Dermacentor variabilis</i> (American Dog tick)	168	142	1	311
<i>Ixodes scapularis</i> (Blacklegged tick)	247	168	22	437
Totals:	436	325	67	828

*Updated 8/5/19

Here is a breakdown of *Ix. scapularis* submissions and collections by county:

Breakdown of <i>Ixodes scapularis</i> Ticks Identified				
County	Life Stage			Totals
	Adult Female	Adult Male	Nymph	
Ashland	5	7	2	14
Ashtabula	7	0	0	7
Belmont	28	32	0	60
Butler	1	0	0	1
Clark	0	0	2	2
Columbiana	16	11	0	27
Coshocton	1	0	0	1
Cuyahoga	1	0	1	2
Erie	2	0	0	2
Fayette	1	1	0	2
Franklin	0	1	0	1
Gallia	2	1	0	3
Geauga	0	0	1	1
Greene	0	0	1	1
Highland	2	1	0	3
Hocking	2	0	0	2
Huron	1	1	0	2

Breakdown of <i>Ixodes scapularis</i> Ticks Identified				
County	Life Stage			Totals
	Adult Female	Adult Male	Nymph	
Jefferson	28	24	0	52
Knox	10	0	2	12
Lake	0	1	1	2
Lawrence	4	5	0	9
Licking	0	0	2	2
Lucas	0	0	2	2
Madison	0	0	1	1
Medina	3	1	2	6
Monroe	8	1	0	9
Morgan	15	15	0	30
Muskingum	5	2	0	7
Noble	0	1	0	1
Perry	6	8	0	14
Pike	10	8	0	18
Portage	4	0	1	5
Richland	4	4	0	8
Ross	0	1	0	1
Scioto	2	4	0	6
Stark	13	18	3	34
Summit	60	20	1	81
Trumbull	1	0	0	1
Warren	1	0	0	1
Washington	1	0	0	1
Wood	2	0	0	2
Unknown	1	0	0	1
Totals:	247	168	22	437