

Vectorborne Surveillance in Ohio November 21, 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 11/21/2019:

2019* Mosquitoes Submitted to ODH ZDP for Arbovirus Testing						
Counties (67 total)	Agencies (78 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	322	75	0	15	0
Ashtabula	Ashtabula City Health Department	1,010	750	0	26	0
	Ashtabula County Health Department	127	124	0	4	0
Athens	Athens City-County Health Department	4,740	4,176	0	154	2
Auglaize	Auglaize County Health Department (w/ODH)	1,628	1,327	0	42	0
Brown	Brown County Health Department (w/ODH)	1,215	960	0	27	0
Butler	Butler County Health Department	3,391	3,253	0	110	2
Champaign	Champaign Health District	51	17	0	10	0
Clark	Clark County Combined Health District	10,067	7,802	0	268	14
Clermont	Clermont County Public Health	3,056	2,849	0	94	2
Clinton	Clinton County Health District (w/ODH)	1,867	992	0	35	0
Columbiana	Columbiana County Health District	1,891	1,272	0	87	0
Coshocton	Coshocton County Health Department	657	548	0	14	0
Crawford	Galion City Health Department	1,217	1,005	0	50	0
Cuyahoga	Cuyahoga County Board of Health	6,372	4,961	0	171	4
Darke	Darke County General Health District	386	35	0	15	0
Defiance	Defiance County General Health District (w/ODH)	1,202	933	0	29	0
Delaware	Delaware General Health District	2,531	1,345	0	172	2

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Counties (67 total)	Agencies (78 total)	# Mosquitoes Submitted	# <i>Culex</i> spp. Pooled	# Pooled Samples Pending	# Pooled Samples Reported	# WNV+ Samples
Erie	Erie County Health Department (w/ODH)	1,303	976	0	34	0
Fairfield	Fairfield Department of Health	285	164	0	24	0
	Franklin County Public Health	2,074	912	0	28	0
Fayette	Fayette County Health Department	8	2	0	2	0
Franklin	Columbus Public Health	33,004	29,688	0	776	55
	Franklin County Public Health	96,922	50,735	0	1,324	25
Fulton	Fulton County Health Department (w/ODH)	557	438	0	18	0
Gallia	Gallia County Health Department	95	60	0	4	0
Geauga	Geauga County Health District	675	513	0	13	0
Greene	Greene County Public Health	205	169	0	10	0
Hamilton	Cincinnati Health Department	2,328	1,908	0	105	1
	Hamilton County Public Health	6,046	4,939	0	183	1
	Springdale Health Department	2,363	1,579	0	146	0
Hancock	Hancock Public Health	9,986	9,164	0	263	5
Hardin	Kenton-Hardin Health Department (w/ODH)	1,786	1,216	0	41	0
Highland	Highland County Health Department (w/ODH)	834	575	0	21	0
Hocking	Hocking County Health Department	3,503	2,329	0	213	0
Jackson	Jackson County Health Department	563	548	0	15	0
Knox	Knox County Health Department	2,660	2,178	0	69	0
Lake	Lake County General Health District	14,392	10,877	0	389	2
Lawrence	Lawrence County Health Department	203	19	0	5	0
Licking	Licking County Health Department	14,465	13,576	0	381	2
Logan	Logan County Health District (w/ODH)	528	403	0	18	0
Lorain	Lorain County Public Health	25,853	23,612	0	552	13
Lucas	Toledo Area Sanitary District	34,486	34,371	0	1,342	59
Madison	Madison County Public Health	626	466	0	22	0
Mahoning	Mahoning County District Board of Health	291	222	0	20	0
	Youngstown City Health District	350	293	0	24	2
Medina	Medina County Health Department	3,622	3,248	0	106	2
Meigs	Meigs County Health Department	704	203	0	59	0
Miami	Miami County Public Health	1,007	652	0	69	0
Montgomery	Public Health - Dayton & Montgomery County	1,948	1,791	0	51	0
Morrow	Morrow County Health District (w/ODH)	319	44	0	6	0

2019* Mosquitoes Submitted to ODH ZDP for Arbovirus Testing						
Counties (67 total)	Agencies (78 total)	# Mosquitoes Submitted	# <i>Culex</i> spp. Pooled	# Pooled Samples Pending	# Pooled Samples Reported	# WNV+ Samples
Muskingum	Zanesville-Muskingum County Health Department	397	305	0	19	0
Paulding	Paulding County Health Department (w/ODH)	1,550	1,033	0	37	0
Perry	Perry County General Health District	30	14	0	4	0
Pickaway	Pickaway County General Health District	5,984	5,370	0	191	2
Pike	Pike County General Health District	2,212	1,999	0	55	0
Portage	Kent City Health Department	36,250	25,834	0	730	18
	Portage County Health District	12,500	11,123	0	366	4
Richland	Richland Public Health	11,897	9,160	0	267	1
	Shelby City Health Department	1,543	1,416	0	49	0
Ross	Ross County Health District	9,274	8,820	0	238	2
Sandusky	Sandusky County Health Department (w/ODH)	695	377	0	21	0
Scioto	Portsmouth City Health Department	799	333	0	41	0
	Scioto County Health Department	1,670	1,289	0	90	1
Shelby	City of Sidney	444	13	0	6	0
Stark	Canton City Public Health	2,965	1,728	0	211	0
	Stark County Health Department	10,110	9,307	0	299	3
Summit	Barberton-Norton Mosquito Abatement District	30,484	18,956	0	845	8
	Summit County Public Health	60,984	57,373	0	1,472	28
Trumbull	Trumbull County Combined Health District	117	92	0	11	0
Tuscarawas	New Philadelphia City Health Department	1,560	1,297	0	46	0
	Tuscarawas County Health Department	7,381	6,756	0	199	0
Union	Union County Health Department	3,874	3,228	0	101	2
Van Wert	Van Wert County General Health District (w/ODH)	1,182	918	0	30	0
Vinton	Vinton County Health Department	2,712	2,624	0	80	0
Warren	Warren County Health District	5,806	5,494	0	134	1
Wood	Bowling Green State University	5,513	950	0	100	0
Wyandot	Wyandot County Public Health	511	458	0	17	0
Totals:		525,459	407,718	0	13,346	263

*Updated 10/25/19

Here is a breakdown by mosquito species identified:

Mosquito Species Identified	
Species	#
<i>Aedes abserratus</i>	705
<i>Aedes albopictus</i>	5,911
<i>Aedes atropalpus</i>	33
<i>Aedes aurifer</i>	185
<i>Aedes canadensis</i>	457
<i>Aedes cantator</i>	799
<i>Aedes cinereus</i>	455
<i>Aedes communis</i>	3
<i>Aedes dorsalis</i>	1
<i>Aedes dupreei</i>	4
<i>Aedes grossbecki</i>	149
<i>Aedes hendersoni</i>	8
<i>Aedes implicatus</i>	11
<i>Aedes intrudens</i>	5
<i>Aedes japonicus</i>	31,475
<i>Aedes provocans</i>	3
<i>Aedes sollicitans</i>	145
<i>Aedes sp.</i>	1,873
<i>Aedes spencerii</i>	1
<i>Aedes sticticus</i>	743
<i>Aedes stimulans</i>	1,007
<i>Aedes tormentor</i>	1
<i>Aedes triseriatus</i>	2,432
<i>Aedes trivittatus</i>	7,172
<i>Aedes vexans</i>	21,478
<i>Anopheles barberi</i>	158
<i>Anopheles perplexens</i>	24
<i>Anopheles punctipennis</i>	4,402
<i>Anopheles quadrimaculatus</i>	1,187
<i>Anopheles sp.</i>	55
<i>Anopheles walkeri</i>	35
<i>Coquillettidia perturbans</i>	3,130
<i>Culex sp.</i>	439,902
<i>Culiseta impatiens</i>	7
<i>Culiseta inornata</i>	230
<i>Culiseta melanura</i>	9
<i>Culiseta minnesotae</i>	1
<i>Culiseta morsitans</i>	1

Mosquito Species Identified	
Species	#
<i>Culiseta</i> sp.	17
<i>Orthopodomyia alba</i>	1
<i>Orthopodomyia signifera</i>	164
<i>Psorophora ciliata</i>	42
<i>Psorophora columbiae</i>	374
<i>Psorophora cyanescens</i>	5
<i>Psorophora discolor</i>	31
<i>Psorophora ferox</i>	316
<i>Psorophora horrida</i>	10
<i>Psorophora howardii</i>	6
<i>Psorophora</i> sp.	6
<i>Toxorhynchites</i> sp.	19
<i>Uranotaenia sapphirina</i>	269
<i>Wyeomyia smithii</i>	2
Total:	525,459

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	70
Brown	Brown County Health Department (w/ODH)	60
Butler	Butler County Health Department	4
Clark	Clark County Combined Health District	24
Clermont	Clermont County Public Health	8
Clinton	Clinton County Health District (w/ODH)	15
Cuyahoga	Cuyahoga County Board of Health	2
Darke	Darke County General Health District	5
Delaware	Delaware General Health District	5
Fairfield	Fairfield Department of Health	16
	Franklin County Public Health	52
Franklin	Columbus Public Health	901
	Franklin County Public Health	2,909
Gallia	Gallia County Health Department	23
Greene	Greene County Public Health	2
Hamilton	Cincinnati Health Department	153
	Hamilton County Public Health	167

Breakdown of <i>Aedes albopictus</i> Mosquitoes Identified		
County	Agency	#
	Springdale Health Department	313
Hancock	Hancock Public Health	1
Highland	Highland County Health Department (w/ODH)	14
Hocking	Hocking County Health Department	133
Lake	Lake County General Health District	13
Lawrence	Lawrence County Health Department	148
Licking	Licking County Health Department	115
Lorain	Lorain County Public Health	2
Madison	Madison County Public Health	6
Meigs	Meigs County Health Department	151
Miami	Miami County Public Health	8
Montgomery	Public Health - Dayton & Montgomery County	6
Muskingum	Zanesville-Muskingum County Health Department	4
Pickaway	Pickaway County General Health District	46
Pike	Pike County General Health District	82
Portage	Portage County Health District	1
Ross	Ross County Health District	65
Scioto	Portsmouth City Health Department	68
	Scioto County Health Department	95
Stark	Canton City Public Health	125
Summit	Summit County Public Health	3
Tuscarawas	New Philadelphia City Health Department	1
Vinton	Vinton County Health Department	2
Warren	Warren County Health District	9
Total:		5,911

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	6
Ashtabula	Ashtabula City Health Department	2
Athens	Athens City-County Health Department	43
Auglaize	Auglaize County Health Department (w/ODH)	19
Brown	Brown County Health Department (w/ODH)	4
Butler	Butler County Health Department	5
Champaign	Champaign Health District	4
Clark	Clark County Combined Health District	4

Breakdown of <i>Aedes triseriatus</i> Mosquitoes Identified		
County	Agency	#
Clermont	Clermont County Public Health	12
Clinton	Clinton County Health District (w/ODH)	2
Columbiana	Columbiana County Health District	8
Coshocton	Coshocton County Health Department	4
Crawford	Galion City Health Department	7
Cuyahoga	Cuyahoga County Board of Health	29
Darke	Darke County General Health District	2
Defiance	Defiance County General Health District (w/ODH)	34
Delaware	Delaware General Health District	51
Erie	Erie County Health Department (w/ODH)	3
Fairfield	Fairfield Department of Health	8
	Franklin County Public Health	0
Franklin	Columbus Public Health	57
	Franklin County Public Health	102
Fulton	Fulton County Health Department (w/ODH)	2
Gallia	Gallia County Health Department	1
Geauga	Geauga County Health District	21
Hamilton	Cincinnati Health Department	26
	Hamilton County Public Health	38
	Springdale Health Department	95
Hancock	Hancock Public Health	47
Hardin	Kenton-Hardin Health Department (w/ODH)	3
Highland	Highland County Health Department (w/ODH)	4
Hocking	Hocking County Health Department	15
Knox	Knox County Health Department	9
Lake	Lake County General Health District	49
Lawrence	Lawrence County Health Department	4
Licking	Licking County Health Department	14
Logan	Logan County Health District (w/ODH)	5
Lorain	Lorain County Public Health	111
Lucas	Toledo Area Sanitary District	2
Madison	Madison County Public Health	6
Mahoning	Mahoning County District Board of Health	1
	Youngstown City Health District	1
Medina	Medina County Health Department	9
Meigs	Meigs County Health Department	28
Miami	Miami County Public Health	2
Muskingum	Zanesville-Muskingum County Health Department	6
Paulding	Paulding County Health Department (w/ODH)	9
Perry	Perry County General Health District	3

Breakdown of <i>Aedes triseriatus</i> Mosquitoes Identified		
County	Agency	#
Pickaway	Pickaway County General Health District	19
Pike	Pike County General Health District	17
Portage	Kent City Health Department	76
	Portage County Health District	207
Richland	Richland Public Health	327
	Shelby City Health Department	1
Ross	Ross County Health District	25
Sandusky	Sandusky County Health Department (w/ODH)	3
Scioto	Portsmouth City Health Department	15
	Scioto County Health Department	18
Shelby	City of Sidney	3
Stark	Canton City Public Health	33
	Stark County Health Department	10
Summit	Barberton-Norton Mosquito Abatement District	195
	Summit County Public Health	337
Tuscarawas	New Philadelphia City Health Department	29
	Tuscarawas County Health Department	110
Union	Union County Health Department	9
Van Wert	Van Wert County General Health District (w/ODH)	7
Warren	Warren County Health District	9
Wood	Bowling Green State University	57
Total:		2,432



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)	191	147	2	340
<i>Ixodes scapularis</i> (Blacklegged tick)	433	383	23	839
Totals:	645	545	69	1,259

*Updated 11/22/19

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	9	2	0	11
Athens	1	0	0	1
Belmont	28	32	0	60
Butler	1	0	0	1
Carroll	13	18	0	31
Champaign	1	0	0	1
Clark	0	0	2	2
Columbiana	34	23	0	57
Coshocton	1	0	0	1
Cuyahoga	2	1	1	4
Erie	2	0	0	2
Fayette	1	1	0	2
Franklin	0	1	0	1
Gallia	7	3	0	10
Geauga	0	0	1	1
Greene	0	0	1	1
Guernsey	30	46	0	76

Breakdown of <i>Ixodes scapularis</i> Ticks Identified				
County	Life Stage			Totals
	Adult Female	Adult Male	Nymph	
Harrison	27	32	0	59
Highland	2	1	0	3
Hocking	5	5	0	10
Holmes	0	0	1	1
Huron	1	1	0	2
Jackson	6	4	0	10
Jefferson	29	24	0	53
Knox	15	0	2	17
Lake	1	1	1	3
Lawrence	4	5	0	9
Licking	0	2	2	4
Lucas	0	0	2	2
Madison	0	0	1	1
Mahoning	2	0	0	2
Medina	3	1	2	6
Meigs	7	5	0	12
Monroe	8	1	0	9
Morgan	26	31	0	57
Muskingum	5	2	0	7
Noble	5	2	0	7
Perry	6	8	0	14
Pike	10	8	0	18
Portage	5	0	1	6
Richland	4	4	0	8
Ross	2	3	0	5
Scioto	2	4	0	6
Stark	51	78	3	132
Summit	60	20	1	81
Trumbull	1	0	0	1
Vinton	2	1	0	3
Warren	1	0	0	1
Washington	2	4	0	6
Wood	3	0	0	3
Unknown	3	2	0	5
Totals:	433	383	23	839