Vector Borne Disease
2025 Surveillance Report

Summit County Public Health

Report Weeks 11 and 12 (July 27 to August 9, 2025)
MMWR Weeks 31 and 32

This report will be issued from June through October of each year (or later if West Nile Virus disease is still a concern). Surveillance will include human and veterinary cases and testing of mosquito pools in Summit County. It will also include updates from Ohio and around the nation. It will include vector-borne diseases besides West Nile Virus.

SUMMIT COUNTY SURVEILLANCE

West Nile virus testing (Table 1): During surveillance period Weeks 11 and 12, there were 6 tests for West Nile virus ordered by Summit County hospitals, of which 0 were positive.

Table 1: West Nile virus (WNV) tests ordered in Summit County hospitals 2025

Week(s)	# of WNV tests ordered this period	# of positive WNV tests this period	Cumulative # of tests ordered this season	Cumulative # of positive tests this season	Percentage of positive tests
Weeks 1 & 2: 5/18 to 5/31	3	0	3	0	0.0%
Weeks 3 & 4: 6/1 to 6/14	5	0	8	0	0.0%
Weeks 5 & 6: 6/15 to 6/28	4	0	12	0	0.0%
Weeks 7 & 8: 6/29 to 7/12	6	0	18	0	0.0%
Weeks 9 & 10: 7/13 to 7/26	3	0	21	0	0.0%
Weeks 11 & 12: 7/27 to 8/9	6	0	27	0	0.0%
Weeks 13 & 14: 8/10 to 8/23	-	-	-	-	-
Weeks 15 & 16: 8/24 to 9/6	-	-	-	-	-
Weeks 17 & 18: 9/7 to 9/20	-	-	-	-	-
Weeks 19 & 20: 9/21 to 10/4	-	-	-	-	-
Weeks 21 & 22: 10/5 to 10/18	-	-	-	-	-

Note: Reporting may not be completed each week. Numbers will be updated when reports are received

Lyme disease testing (Table 2): There were 45 diagnostic test series performed for Lyme disease during Weeks 11 and 12, 19 tests were positive and 0 were indeterminate. For information about Diagnosis and Testing, visit this link: https://www.cdc.gov/lyme/diagnosistesting/index.html.

Table 2. Lyme Disease Tests Ordered in Summit County Hospitals 2025

Week(s)	# of Lyme tests ordered this period	# of positive Lyme tests this period	Cumulative # of tests ordered this season	Cumulative # of positive tests this season	Percentage of positive tests
Weeks 1 & 2: 5/18 to 5/31	19	10	19	10	52.63%
Weeks 3 & 4: 6/1 to 6/14	22	11	41	21	51.22%
Weeks 5 & 6: 6/15 to 6/28	59	26	100	47	47.00%
Weeks 7 & 8: 6/29 to 7/12	50	22	150	69	46.00%
Weeks 9 & 10: 7/13 to 7/26	42	16	192	85	44.27%
Weeks 11 & 12: 7/27 to 8/9	45	19	237	104	43.88%
Weeks 13 & 14: 8/10 to 8/23	-	-	-	-	-
Weeks 15 & 16: 8/24 to 9/6	-	-	-	-	-
Weeks 17 & 18: 9/7 to 9/20	-	-	-	-	-
Weeks 19 & 20: 9/21 to 10/4	-	-	-	-	-
Weeks 21 & 22: 10/5 to 10/18	-	-	-	-	-

Note: Reporting may not be completed each week. Numbers will be updated when reports are received

Reported Vector-borne diseases in 2025 (Table 3): As of August 9, 2025 there were 122 reported cases of Lyme disease; 38 were confirmed and 84 were suspected status. There was also 1 confirmed case of Malaria among Summit County residents.

Table 3: Vector-borne diseases reported in Summit County, 2025 cumulative totals

	Confirmed	Suspected	Notes
Tick-borne diseases:			
Babesiosis	0	0	
Erhlichiosis / anaplasmosis	0	0	
Lyme disease	38	84	
Powassan virus disease	0	0	
Rocky Mountain spotted fever	0	0	
Mosquito-borne diseases:			
Chikungunya	0	0	
Dengue	0	0	
Eastern equine encephalitis	0	0	
LaCrosse virus disease	0	0	
Malaria	1	0	Travel Associated*
St. Louis encephalitis virus disease	0	0	
Zika virus infection	0	0	
West Nile virus infection	0	0	

Source: Ohio Disease Reporting System (ODRS); only confirmed, probable, and suspected cases are included.

Table 4. Notable mosquito and tick species identifications in Summit County (as of August 14, 2025)			
Species name	**Diseases associated**	**Summit County**	**Ohio**
Mosquito species			
Aedes albopictus	Chikungunya, dengue fever, yellow fever	21	1,800
Aedes triseriatus	La Crosse encephalitis	630	2,675
Coquillettidia perturbans	Eastern equine encephalitis, West Nile virus	210	409
Tick species			
Amblyomma americanum	Ehrlichiosis, tularemia, red meat allergy	-	-
Dermacentor variabilis	Rocky Mountain spotted fever, tularemia	-	-
Ixodes scapularis	Lyme disease, babesiosis, anaplasmosis	-	-
Source: Ohio Department of Health (Identification via mailed specimens, emailed photos and iNaturalist observations)			

Table 5. Reported Aseptic/Viral Meningitis Cases in Summit County in 2025 (confirmed & probable)		
Reporting Week(s)	**Cases reported this period**	**Cumulative cases for the season**
Aseptic meningitis cases reported prior to season (1/1 to 5/18/2025)	**2**	**-**
Weeks 1 & 2: 5/18 to 5/31	**0**	**0**
Weeks 3 & 4: 6/1 to 6/14	**1**	**1**
Weeks 5 & 6: 6/15 to 6/28	**1**	**2**
Weeks 7 & 8: 6/29 to 7/12	**1**	**3**
Weeks 9 & 10: 7/13 to 7/26	**2**	**5**
Weeks 11 & 12: 7/27 to 8/9	**1**	**6**
Weeks 13 & 14: 8/10 to 8/23	-	-
Weeks 15 & 16: 8/24 to 9/6	-	-
Weeks 17 & 18: 9/7 to 9/20	-	-
Weeks 19 & 20: 9/21 to 10/4	-	-
Weeks 21 & 22: 10/5 to 10/18	-	-
Source: Ohio Disease Reporting System (ODRS)		

Reported aseptic/viral meningitis cases (Table 5): Prior to the reporting season, there were 2 reported cases of aseptic meningitis. 5 confirmed case and 1 probable case have been reported up to week 12 of the surveillance season. Aseptic/viral meningitis is the most common type of meningitis and occurs predominately in the summer and fall. While most aseptic/viral meningitis cases are due to gastrointestinal or respiratory viruses, similar symptoms may be present with arthropod-borne diseases.

Mosquito testing by the Ohio Department of Health: Based on the ODH mosquito testing summary released on August 14, 2025, 65,656 mosquitoes were collected as 1,594 pooled samples throughout Summit County. 163 of the pooled samples were positive for West Nile Virus.

Table 6. Mosquito Testing in Summit County (*samples processed by noon on 8/14/2025*)	
Mosquitoes identified	65,656
Pooled samples tested	1,594
Positive WNV pooled samples	163
Note: All mosquitoes pools tested were *Culex spp.*	

Ohio Department of Health Mosquito-borne Disease Surveillance- As of August 7, 2025

309,838

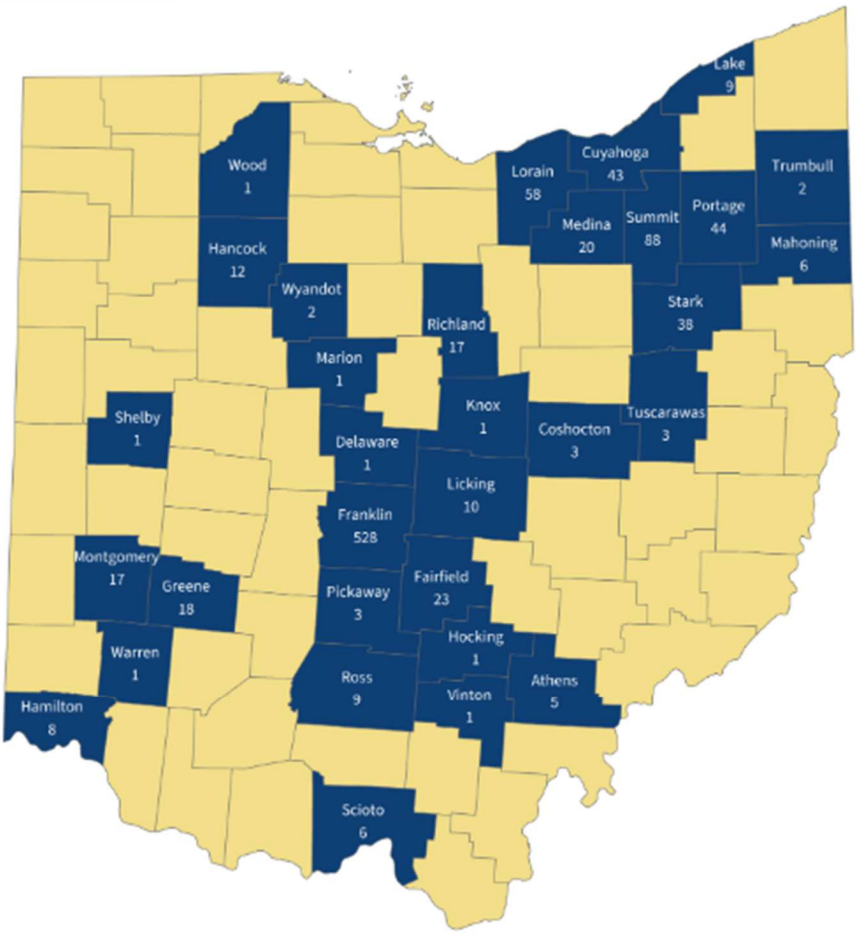
Mosquitoes tested from 56 agencies in 45 counties, pooled into 8,723* samples.

1

West Nile virus disease human case.

980

West Nile virus positive mosquito pools from 32 counties:



Athens (5), Coshocton (3), Cuyahoga (43), Delaware (1), Fairfield (23), Franklin (528), Greene (18), Hamilton (8), Hancock (12), Hocking (1), Knox (1), Lake (9), Licking (10), Lorain (58), Mahoning (6), Marion (1), Medina (20), Montgomery (17), Pickaway (3), Portage (44), Richland (17), Ross (9), Scioto (6), Shelby (1), Stark (38), Summit (88), Trumbull (2), Tuscarawas (3), Vinton (1), Warren (1), Wood (1), Wyandot (2).

* In addition to samples tested by the Ohio Department of Health, Athens City-County Health Department, Columbus Public Health, Delaware Public Health District, Franklin County Public Health, and Licking County Health Department tested some of their samples.

Ohio Department of Health Tick-borne Disease Surveillance- As of August 7, 2025

Blacklegged ticks identified.

Human cases of Associated Tick-borne Diseases:

- 1,043 Lyme disease- Adams (2), Ashland (17), Ashtabula (3), Athens (34), Belmont (94), Butler (2), Carroll (41), Clark (3), Clermont (16), Columbiana (61), Coshocton (41), Cuyahoga (21), Delaware (1), Erie (2), Fairfield (22), Franklin (33), Gallia (2), Geauga (10), Greene (3), Guernsey (34), Hamilton (8), Harrison (21), Highland (4), Hocking (10), Holmes (30), Huron (2), Jackson (15), Jefferson (90), Knox (23), Lake (6), Lawrence (4), Licking (67), Logan (1), Lorain (7), Lucas (5), Madison (1), Mahoning (15), Marion (1), Medina (11), Meigs (5), Miami (1), Monroe (7), Montgomery (5), Morgan (9), Morrow (1), Muskingum (67), Noble (13), Ottawa (1), Perry (5), Pickaway (4), Portage (14), Putnam (1), Richland (37), Ross (5), Scioto (3), Stark (63), Summit (29), Trumbull (19), Tuscarawas (57), Vinton (4), Washington (10), Wayne (25), Williams (1), Wood (1), unknown county (1).
- 11 Anaplasmosis Human Case- Carroll (1), Coshocton (2), Cuyahoga (2), Harrison (2), Huron (1), Licking (1), Stark (1), Summit (1).
- 1 Babesiosis – Columbiana (1).

American dog ticks identified.

Human cases of Associated Tick-borne Diseases:

- 6 Rocky Mountain spotted fever (RMSF) - Clinton (1), Gallia (1), Hamilton (1), Lake (1), Lucas (1), Montgomery (1), Vinton (1).

Lone Star ticks identified.

Human cases of Associated Tick-borne Diseases:

- 11 Ehrlichiosis - Columbiana (1), Franklin (1), Hamilton (1), Hocking (1), Jackson (2), Jefferson (2), Ross (1), Scioto (2), Wood (1).

Source: https://odh.ohio.gov/know-our-programs/zoonotic-disease-program/news/vectorborne-disease-update

Special note for travelers:

Ohioans traveling to areas where local transmission is occurring should be aware of the ongoing situation and make every effort to avoid mosquito bites. Additional information can be found from the Centers for Disease Control and Prevention (CDC)'s Travelers' Health and Pan-American Health Organization websites.

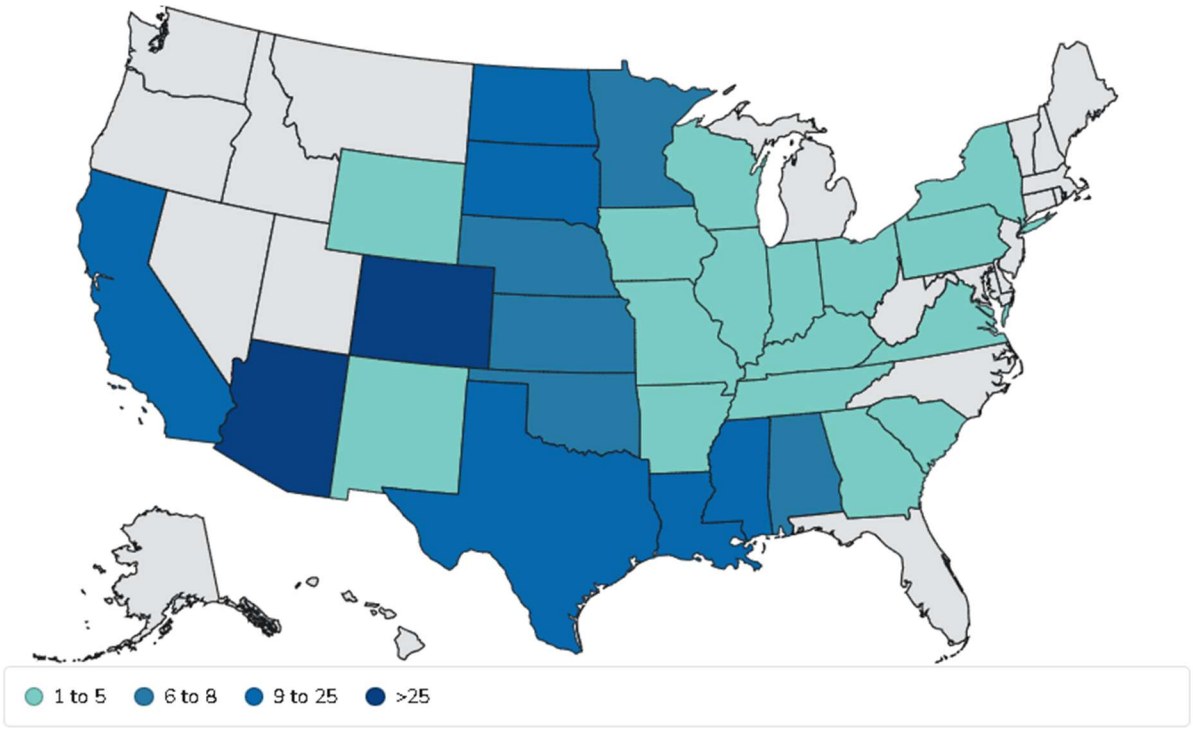
UNITED STATES SURVEILLANCE

Table 7. Reported Vector Borne disease in the United States, 2025

Disease	MMWR Weeks 31 and 32	2025 Cumulative (as of 8/9)
Babesiosis	Not reported weekly by CDC	
Chikungunya	0	51
Dengue (includes dengue-like illness)	13	535
Eastern equine encephalitis	0	0
Ehrlichiosis / anaplasmosis	Not reported weekly by CDC	
Jamestown Canyon virus disease	0	3
LaCrosse virus disease	1	13
Lyme Disease	Not reported weekly by CDC	
Malaria	14	733
Powassan virus disease	1	28
Spotted fever rickettsiosis	Not reported weekly by CDC	
St. Louis encephalitis virus disease	0	0
West Nile virus infection	18	221
Zika virus infection, non-congenital	0	4
Note: Data is provisional and subject to change **NR**: Not Reported		

Source: https://stacks.cdc.gov/

Figure 1. West Nile virus activity by state – United States, 2025 (as of August 12, 2025)



Source: https://www.cdc.gov/west-nile-virus/data-maps/current-year-data.html

TRENDS IN VECTOR BORNE DISEASE IN SUMMIT COUNTY, 2014 - 2024

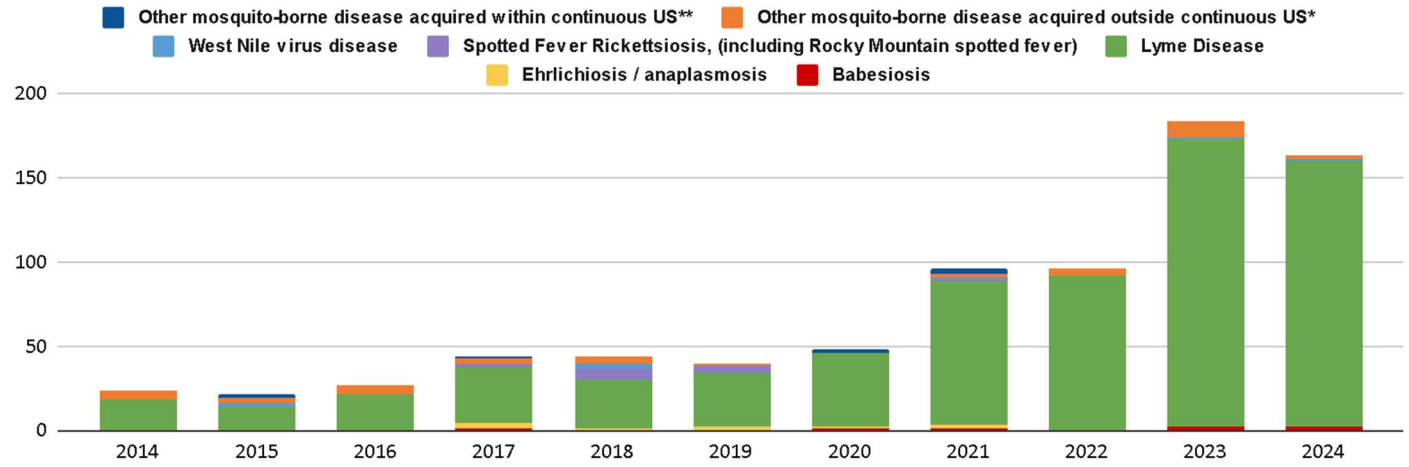
Table 8 provides data on the vector borne disease that were reported in Summit County from 2014 to 2024. The vector for Lyme disease, the blacklegged tick (*Ixodes scapularis*), was first identified in Ohio in 1989, but populations did not begin to increase dramatically until 2009. The blacklegged tick is now established throughout eastern and southern Ohio, and has been collected in all of Ohio's 88 counties.

Table 8. Reported vector-borne disease cases in Summit County, 1/1/2014 - 12/31/2024

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Babesiosis	0	0	0	1	0	0	1	1	0	2	2
Ehrlichiosis / anaplasmosis	0	0	0	3	1	2	1	2	0	0	0
Lyme Disease	18	14	21	33	29	32	44	86	92	171	158
Spotted Fever Rickettsiosis, (including Rocky Mountain spotted fever)	0	0	0	2	6	4	0	1	0	0	0
West Nile virus disease	0	2	0	1	3	0	0	1	0	1	1
Other mosquito-borne disease acquired outside continuous US*	6	3	6	3	5	2	0	2	4	10	2
Other mosquito-borne disease acquired within continuous US**	0	2	0	1	0	0	2	3	0	0	0
	24	21	27	44	44	40	48	96	96	184	163

Other notable events in vector borne disease surveillance were the increase in Chikungunya cases in 2014 (reported as other arthropod-borne diseases) and the Zika virus disease epidemic of 2016. Increases in Ehrlichiosis and spotted fever rickettsiosis were observed from 2017 to 2019. The incidence of other vector-borne diseases, including West Nile virus disease and other tick-borne illness have remained consistently low.

Figure 2. Reported vector-borne disease cases in Summit County, 2014 – 2024



Notes: * Includes imported cases of malaria, chikungunya, dengue, and Zika virus infection
** Includes LaCrosse virus disease and St. Louis encephalitis virus disease

Data Source: Ohio Disease Reporting System

About this report: *Reporting agencies include Summit County hospital laboratories and the Ohio Department of Health. Vector-borne disease case data for Summit County are obtained from the Ohio Disease Reporting System.*

Many thanks to all agencies who report vector-borne disease data weekly.

Reporting from participants may not be complete each week. Numbers may change as updated reports are received. For questions, please contact Julie Zidones (JZidones@schd.org) or the Summit County Public Health Communicable Disease Unit (330-375-2662). This report was issued on **August 18, 2025**.