

Report Highlights:

- **Fifty-seven additional mosquito pools tested positive for West Nile Virus (WNV) since last week's report. 143 mosquito pools have tested positive in 18 counties in 2025, down from 227 positive pools this time last year.**
- **The average number of Culex mosquitoes reported in the previous two weeks was highest in Hudson County, followed by Cumberland and Salem counties. Culex mosquitoes are predominantly responsible for WNV transmission and are often found around the home, taking advantage of standing water sources (e.g., buckets, wheelbarrows, tarps).**
- **One mosquito pool tested positive for Jamestown Canyon Virus (JCV) in Sussex County in week 29. In 2024 there were four total JCV pools, two each in Cumberland and Monmouth counties.**
- **There have been no human or animal cases of WNV or JCV and no human, animal, or mosquito detections of Eastern equine encephalitis (EEE) in 2025.**
- **One mosquito pool tested positive for La Crosse Encephalitis Virus (LACV) in Sussex County in week 26. The last LACV positive pool was in Sussex County in 2023.**
- **The number of tick-related ED visits continued to decline but is slightly above the 5-year average.**

Human Vector-borne Disease Cases

N.J.A.C. 8:57 mandates public health reporting of communicable diseases. 2025 data reflect cases that have been approved by NJDOH and do not include cases under investigation. Due to the time needed for public health investigation, the number of tickborne diseases (except for Lyme disease) may be significantly lower than actual counts and should be interpreted with caution. All 2025 numbers are preliminary and subject to change. Some cases considered "presumptive positive" are pending additional testing. Case counts for 2024 reflect the annual total for that year.

Mosquito-borne diseases			Tickborne Diseases/Conditions		
	2025	2024		2025	2024
Chikungunya	-	17	Alpha-gal syndrome	89	374
Dengue	8	127	Anaplasmosis	121	175
Eastern equine encephalitis	-	2	Babesiosis	120	276
Jamestown Canyon	-	1	<i>Borrelia miyamotoi</i>	4	13
Malaria	30	107	Ehrlichiosis	30	78
West Nile	-	41	Lyme disease*	3,606	6,258
Zika	-	-	Powassan	-	2
			Spotted fever group rickettsioses	11	27
			Tularemia	-	2

* Lyme disease surveillance transitioned to laboratory-based surveillance in 2022.

Mosquito-borne Disease Activity

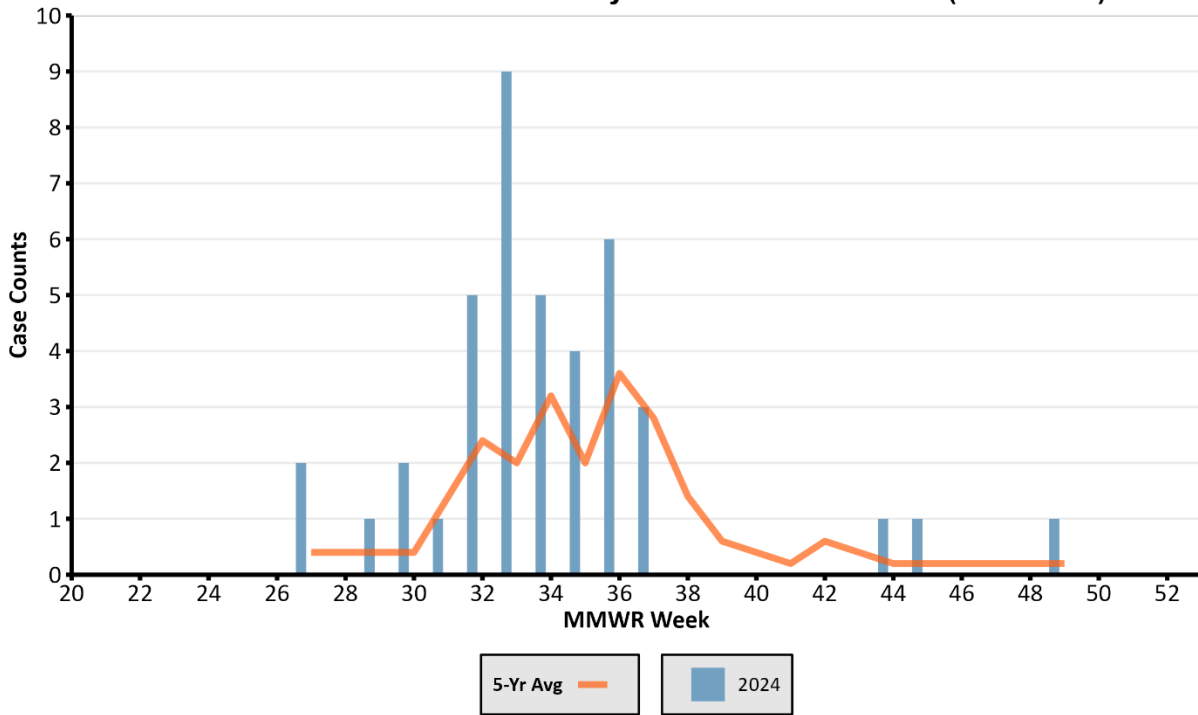
The New Jersey Department of Health Public Health and Environmental Laboratories (PHEL) and the Cape May County Department of Mosquito Control Bio-safety Level 3 Laboratory (CMBSL3) perform arboviral testing on mosquito pools collected by county mosquito control agencies throughout New Jersey.*

*Test results may be incomplete as counties submit pools for testing on specific weekdays. Data reflects test results downloaded from JerseySurv on July 25, 2025, at 8:30 a.m.

West Nile Virus

- There have been no human or animal cases of WNV reported in NJ in 2025.
- State mosquito surveillance and testing started May 19th, although some counties collected "early season" samples (213 mosquito pools collected prior to week 20). Out of 4,842 mosquito pools tested, 143 have tested positive for WNV in 18 counties, the earliest collected in Gloucester County in week 16. In 2024, the earliest WNV detection was reported in Gloucester County, collected in week 18.
- WNV detections have been found in *Culex pipiens/restuans/salinarius* (130), *Culex pipiens* (6), *Aedes albopictus* (4), *Aedes triseriatus* (1), *Anopheles punctipennis* (1), and *Culex salinarius* (1) mosquitoes.
- The average number of *Culex* species mosquitoes reported in the previous two weeks from NJ Light Traps was highest in Hudson County, followed by Cumberland and Salem counties.

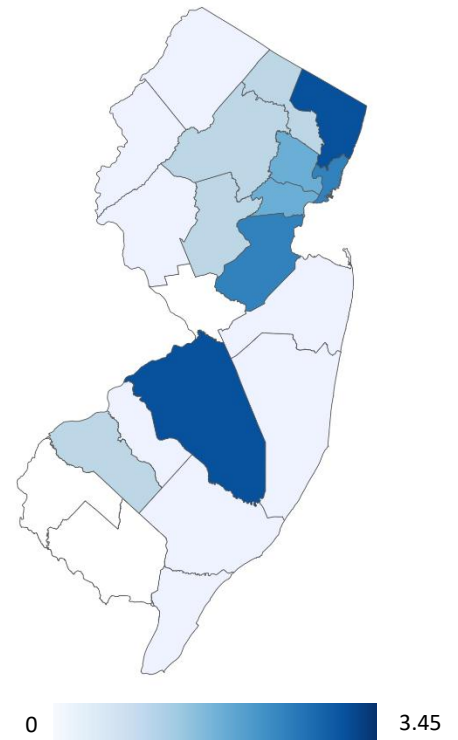
West Nile Virus Human Cases by Week of Illness Onset (2024-2025)



WNV Mosquito Pool Testing

County	WEEK 29 Positive Pools		Cumulative Pos. Total (WEEK 29)		# Pools Tested	Cumulative MIR
	2025	2024	2025	2024		
Burlington	2	6	6	10	83	3.45
Bergen	13	10	39	19	180	3.27
Hudson	7	6	12	24	104	2.97
Middlesex	4	12	21	23	150	2.69
Union	6	5	12	27	131	2.12
Essex	4	5	7	9	169	1.88
Morris	6	3	9	8	200	1.30
Passaic		10	4	21	127	1.10
Somerset		6	4	15	143	1.07
Gloucester		8	6	15	263	0.84
Monmouth		8	5	12	180	0.71
Hunterdon	3	2	4	9	143	0.63
Sussex	2		4	1	216	0.49
Camden			2	1	174	0.43
Ocean		2	1	5	180	0.38
Warren		6	2	9	200	0.27
Atlantic			1	1	179	0.24
Cape May	1	1	4	8	1430	0.23
Cumberland					190	
Mercer		3		7	181	
Salem				3	219	
Total	48	93	143	227	4,842	-

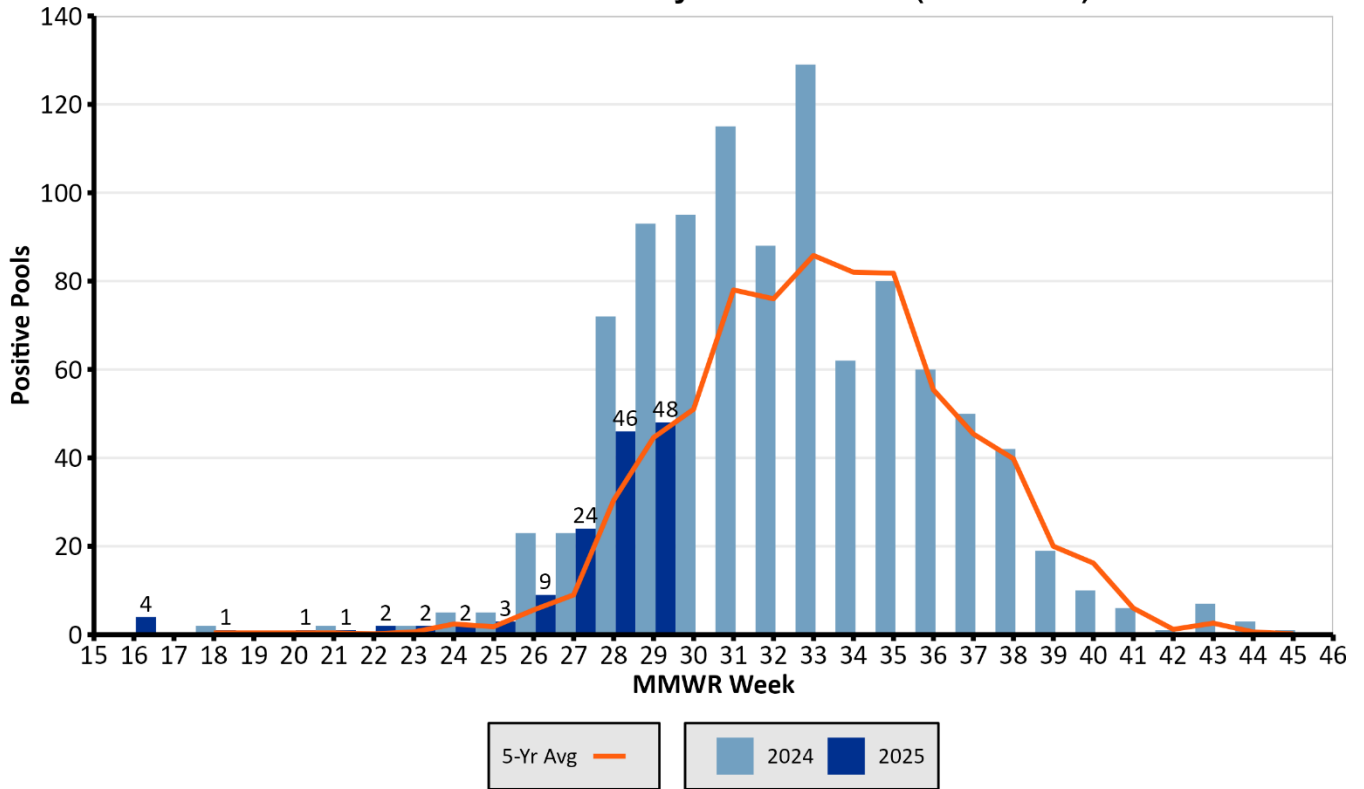
Cumulative WNV MIR, 2025



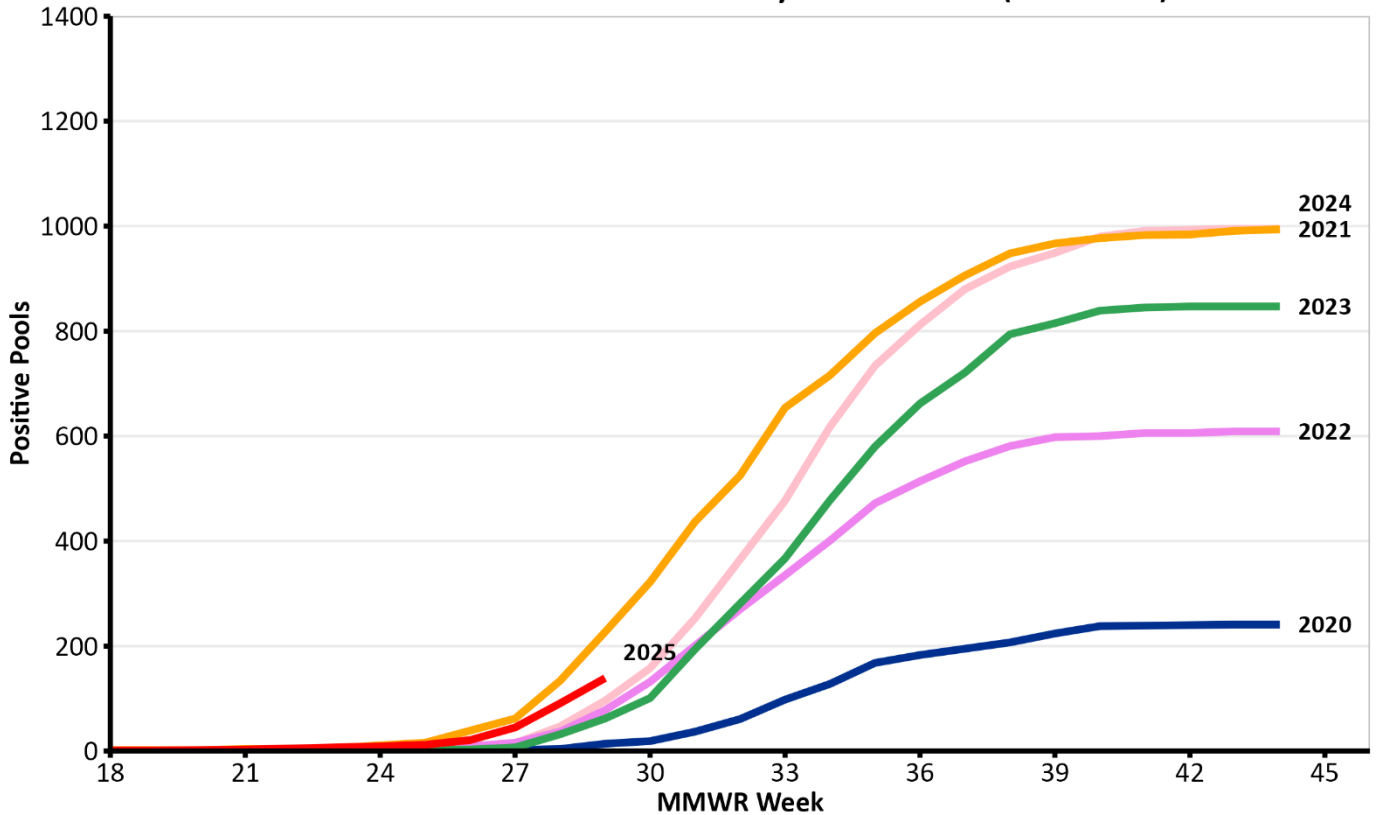
Minimum infection rate (MIR) is defined as the number of positive mosquito pools divided by the total number of mosquitoes tested x 1000

WEEK 29: July 14 - 20, 2024; July 13 - 19, 2025

WNV Positive Pools by MMWR Week (2024-2025)



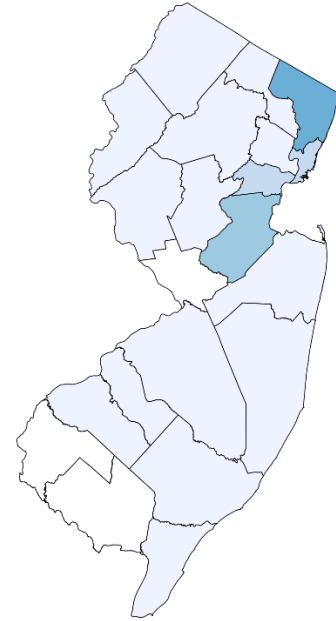
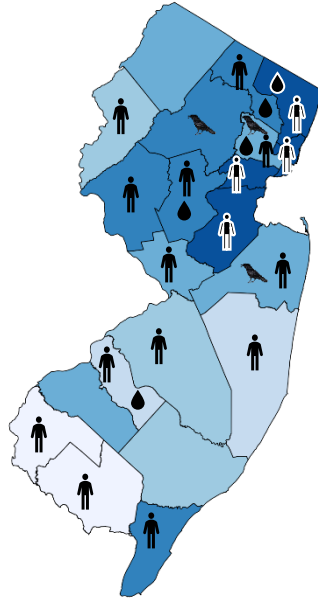
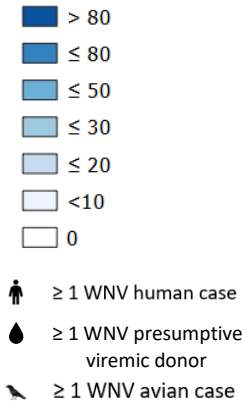
WNV Cumulative Positive Pools by MMWR Week (2020-2025)



2024 WNV Activity

Cumulative WNV Activity, 2025

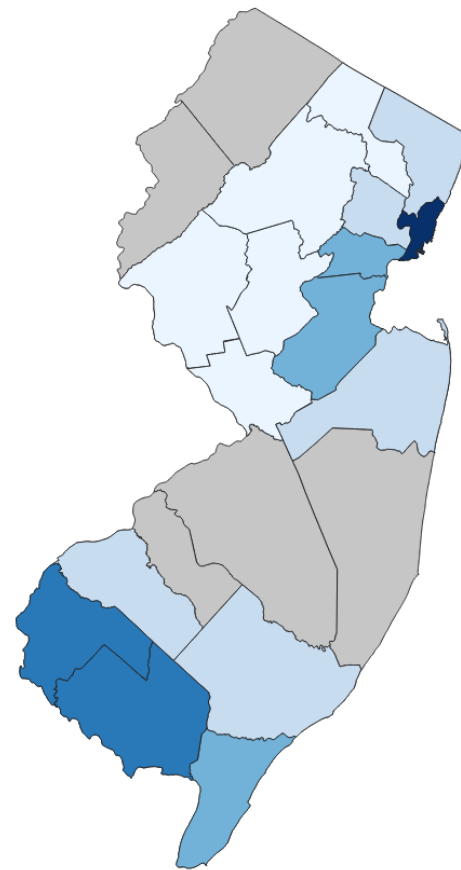
WNV Positive Pools



Average # *Culex* Mosquitoes per Trap Night (average mosquito abundance)

Average Mosquito Abundance, *Culex* spp., Week 28 – 29*

County	WEEK 28 – 29 Average Abundance*
Hudson	20.55
Cumberland	15.68
Salem	11.06
Union	8.12
Cape May	6.51
Middlesex	5.76
Monmouth	4.19
Gloucester	3.10
Atlantic	2.16
Essex	1.53
Bergen	1.25
Hunterdon	0.61
Morris	0.57
Mercer	0.34
Somerset	0.33
Passaic	0.00
Burlington	No available data
Camden	No available data
Ocean	No available data
Sussex	No available data
Warren	No available data



* Average mosquito abundance is defined as the average number of mosquitoes caught per trap night over a defined period and is calculated based on *Culex pipiens*, *restuans*, and *salinarius* species caught in NJ Light Traps (NLT) only.

Eastern Equine Encephalitis (EEE)

- There have been no human or animal cases of EEE reported in NJ in 2025. EEE human cases were last reported in 2024 (2 cases).
- Out of 4,765 mosquito pools tested for EEE, none have tested positive.
- In 2024, the first EEE positive pool was detected in Week 28 in Cape May County.

EEE Mosquito Pool Testing

County	WEEK 29 Positive Pools		Cumulative Pos. Total* (WEEK 29)		# Pools Tested	Cumulative MIR
	2025	2024	2025	2024	2025	2025
Atlantic					179	
Bergen					180	
Burlington					71	
Camden					172	
Cape May				1	1430	
Cumberland					190	
Essex					169	
Gloucester					258	
Hudson					104	
Hunterdon					140	
Mercer					180	
Middlesex					149	
Monmouth					180	
Morris				1	200	
Ocean					174	
Passaic					127	
Salem					219	
Somerset					143	
Sussex					184	
Union		1		1	131	
Warren					185	
Total	0	1	0	3	4,765	-

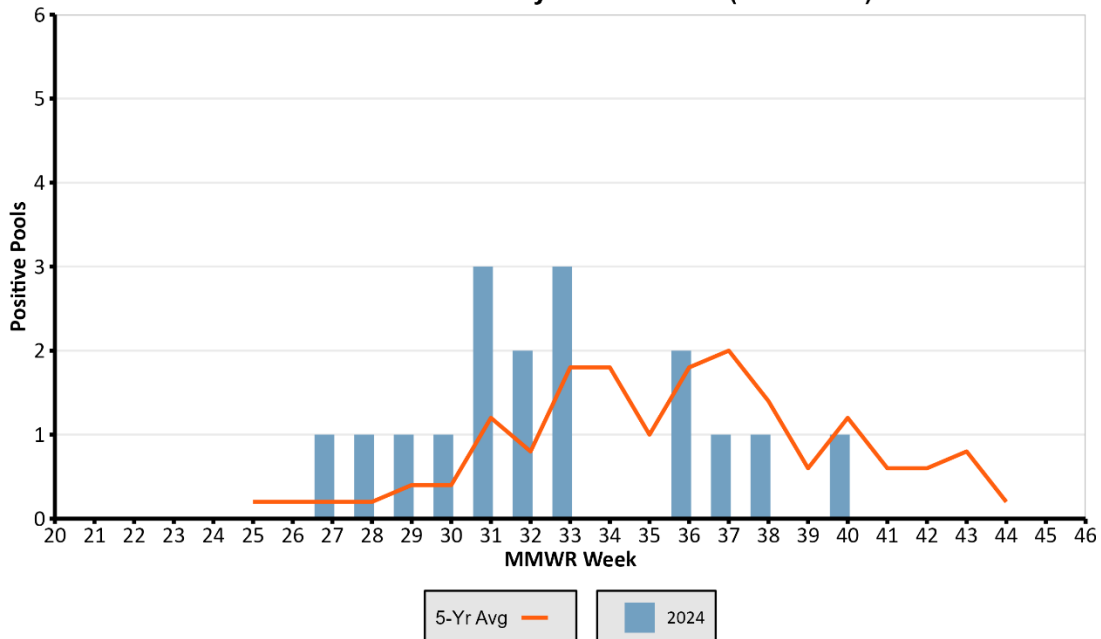
Cumulative EEE MIR, 2025



Minimum infection rate (MIR) is defined as the number of positive mosquito pools divided by the total number of mosquitoes tested x 1000

WEEK 29: July 14 - 20, 2024; July 13 - 19, 2025

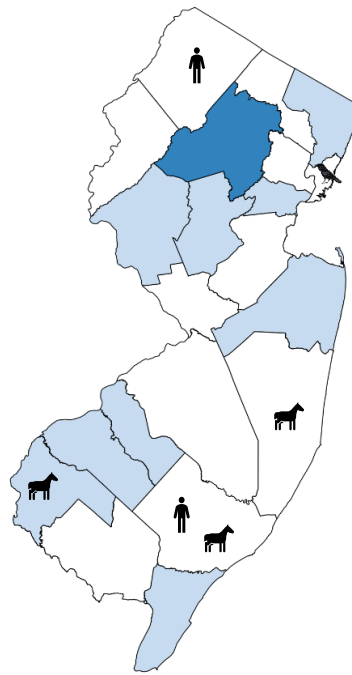
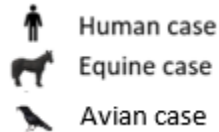
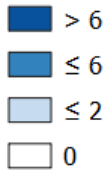
EEE Positive Pools by MMWR Week (2024-2025)



2024 EEE Activity

Cumulative EEE Activity, 2025

EEE Positive Pools



Jamestown Canyon Virus (JCV)

- There have been no human cases of JCV reported in NJ in 2025. In 2024 there was one human case of JCV in week 19 from Sussex County.
- Out of 4,765 mosquito pools tested for JCV, one mosquito pool was positive from week 29 in Sussex County. The positive pool was detected in *An. punctipennis* mosquitoes.
- In 2024, the first JCV positive pool was detected in week 23 from Cumberland County.

JCV Mosquito Pool Testing

County	WEEK 29 Positive Pools		Cumulative Pos. Total* (WEEK 29)		# Pools Tested 2025	Cumulative MIR 2025
	2025	2024	2025	2024		
Sussex	1		1		184	0.12
Atlantic					179	
Bergen					180	
Burlington					71	
Camden					172	
Cape May					1430	
Cumberland				2	190	
Essex					169	
Gloucester					258	
Hudson					104	
Hunterdon					140	
Mercer					180	
Middlesex					149	
Monmouth					180	
Morris					200	
Ocean					174	
Passaic					127	
Salem					219	
Somerset					143	
Union					131	
Warren					185	
Total	1	0	1	2	4,765	-

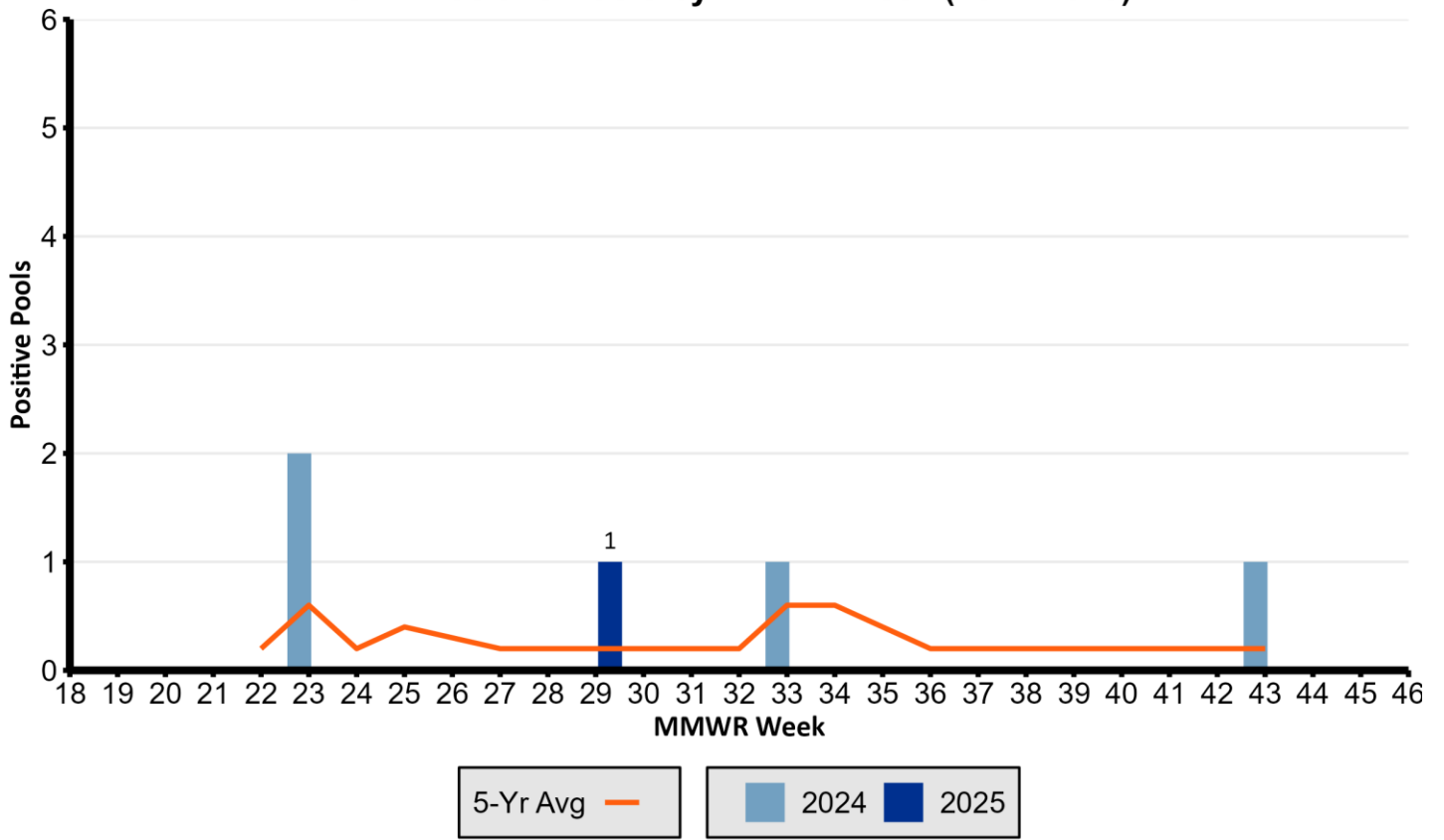
Cumulative JCV MIR, 2025



Minimum infection rate (MIR) is defined as the number of positive mosquito pools divided by the total number of mosquitoes tested x 1000

WEEK 29: July 14 - 20, 2024; July 13 - 19, 2025

JCV Positive Pools by MMWR Week (2024-2025)



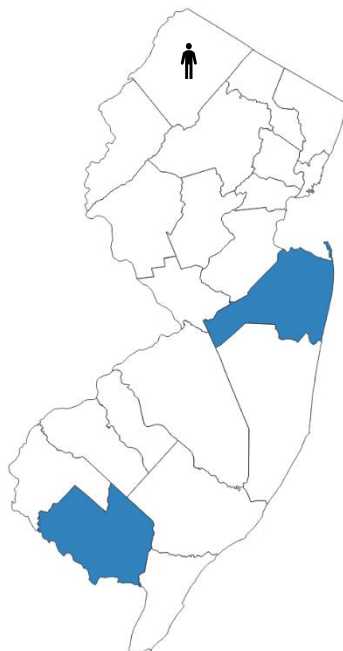
2024 JCV Activity

Cumulative JCV Activity, 2025

JCV Positive Pools

- ≥ 2
- 1
- 0

Human case



Other Mosquito-borne Viruses

- One mosquito pool tested positive for LACV in Sussex County in week 26.

Cumulative 2025 Mosquito Pool Testing (Other Viruses^a)

County	SLE		LAC		CHIKV		DENV		ZIKV	
	Pools	Pos	Pools	Pos	Pools	Pos	Pools	Pos	Pools	Pos
Atlantic	179									
Bergen	180									
Burlington	71		12							
Camden	172		4		1		1		1	
Cape May	1430		50		28		28		28	
Cumberland	190									
Essex	169									
Gloucester	258		5							
Hudson	104									
Hunterdon	140		3							
Mercer	180		4							
Middlesex	149		1		1		1		1	
Monmouth	180									
Morris	200				2		2		2	
Ocean	174		6							
Passaic	127		5							
Salem	219		12							
Somerset	143									
Sussex	184		32	1						
Union	131									
Warren	185		15							
Total	4,765	-	149	1	32	-	32	-	32	-

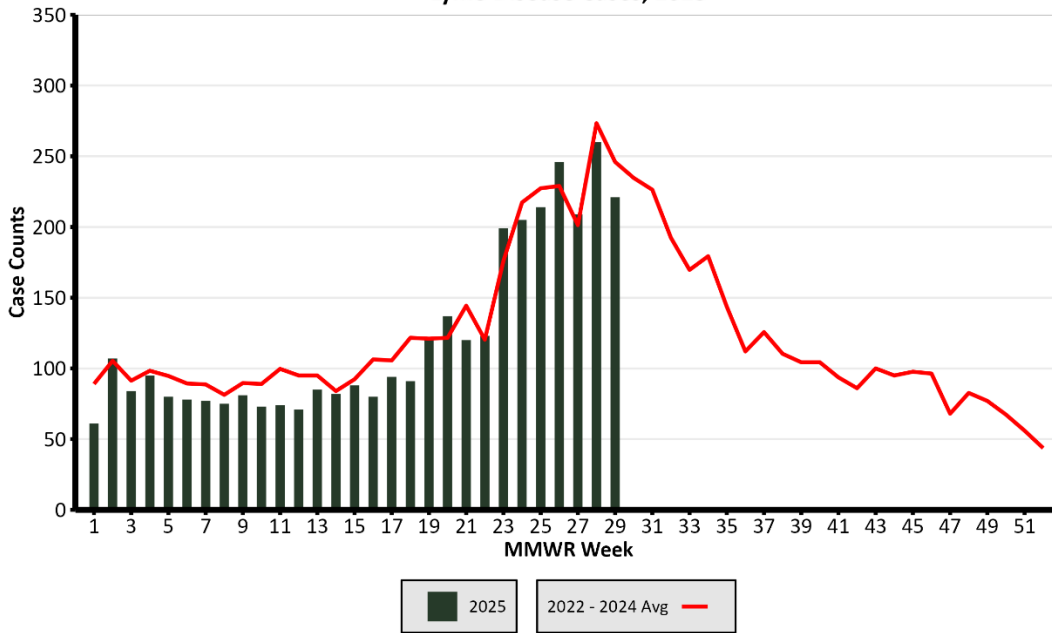
^a St. Louis virus (SLE), La Crosse encephalitis (LAC), Chikungunya virus (CHIKV), Dengue virus (DENV), Zika Virus (ZIKV)
 Numbers in white columns represent number of pools tested to date in 2025
 Number in blue shaded columns represent positive pools in 2025

Tickborne Disease Activity

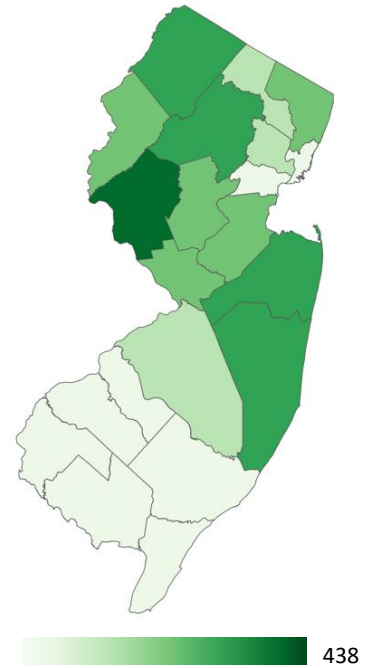
Lyme Disease

- There have been 3,606 cases of Lyme disease reported in New Jersey in 2025.
- The number of cases in week 29 is lower than the previous week and is below the three-year average.
- The largest numbers of Lyme disease cases have been reported in the northwestern part of the state (Hunterdon, Morris, and Sussex counties) as well as in Monmouth and Ocean counties.

Lyme Disease Cases, 2025



Lyme Disease Cases, 2025

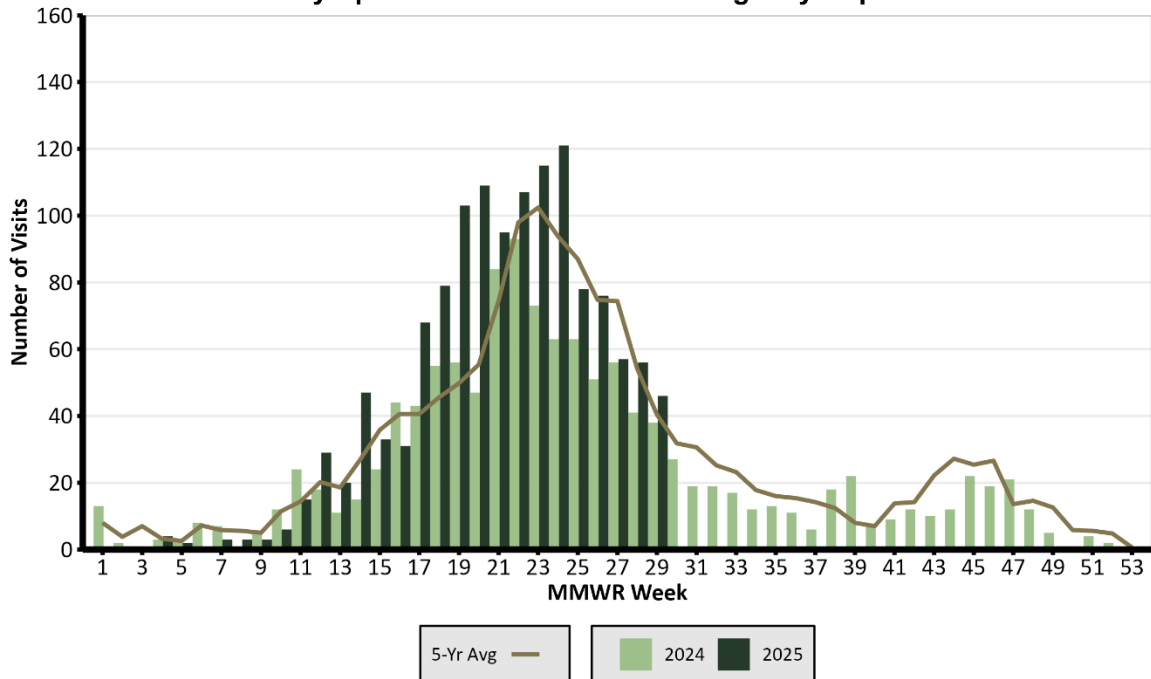


Tick-related Emergency Department Visits

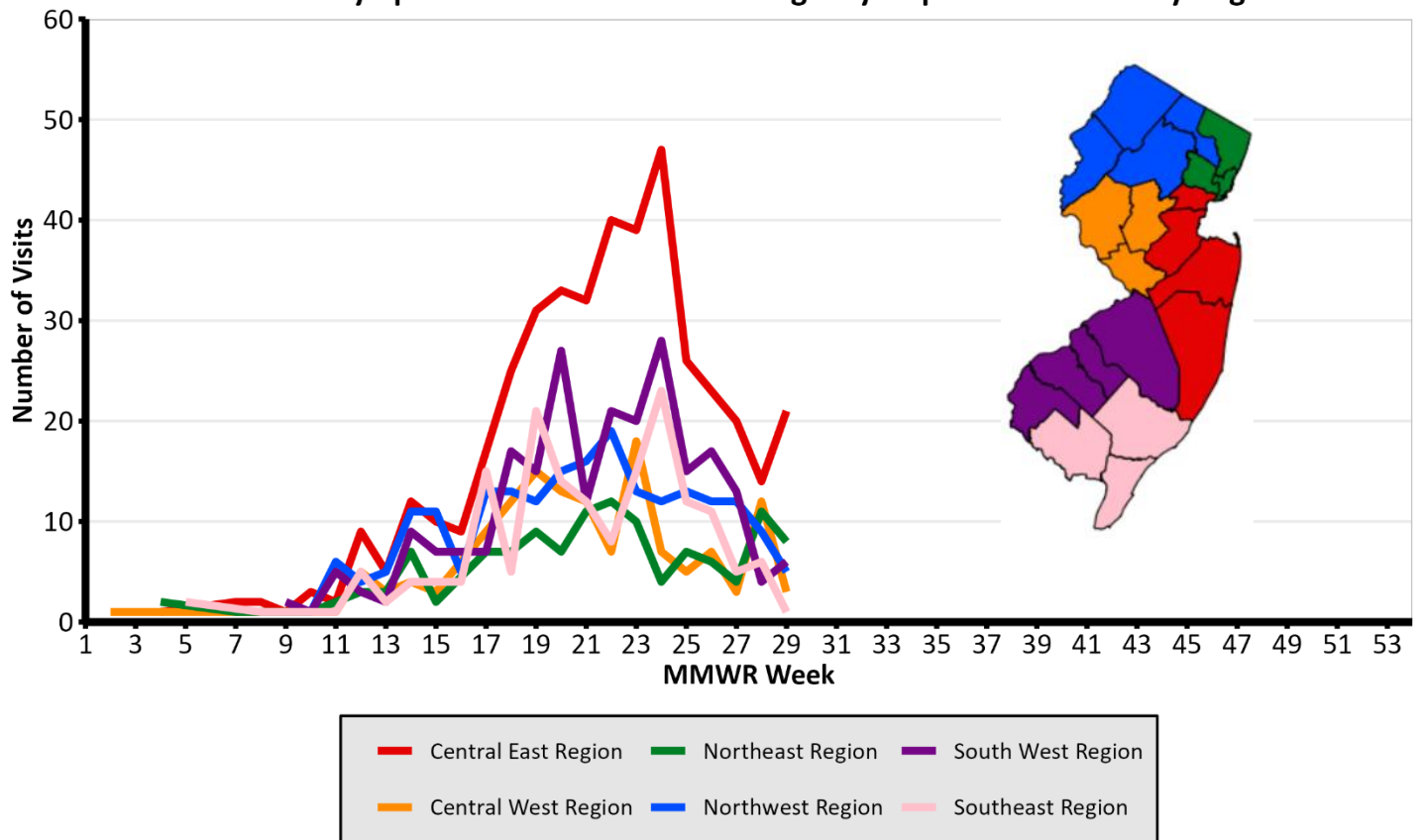
New Jersey’s syndromic surveillance system, known as EpiCenter, receives real time Emergency Department (ED) data from 78 acute care and satellite health (99 percent reporting) facilities statewide. The system collects “chief complaint” information and limited patient registration data from existing ED computer systems. The chart below represents N.J. residents seen at emergency departments statewide with a tick-bite complaint or signs/symptoms associated with a reported tick-bite. Tick-related ED visits occur throughout the year with peak number of visits in the summer months and a smaller peak in the fall weeks when adult blacklegged ticks are active.

The number of tick-related ED visits continued to decline but is slightly above the 5-year average.

New Jersey EpiCenter: Tick-Related Emergency Department Visits



New Jersey EpiCenter: Tick-Related Emergency Department Visits by Region



For more information

- NJDOH Communicable Disease Service: <https://www.nj.gov/health/cd/topics/vectorborne.shtml>
- New Jersey Vector-borne Disease Dashboard: https://dashboards.doh.nj.gov/views/public_dashboard/Intro
- New Jersey Arboviral Activity Maps: <http://bit.ly/JerseySurv>
- NJDEP Office of Mosquito Control Coordination: <https://www.nj.gov/dep/mosquito/>
- NJDA Division of Animal Health: <https://www.nj.gov/agriculture/divisions/ah/>