

Annual Report - 2025



National Weather Reports

After the fifth-warmest winter on record, the Chicago area moved into a warm spring with normal precipitation. June precipitation levels were relatively normal compared to the previous year's wetter month, though some areas experienced localized increases that contributed to floodwater mosquito activity.

June precipitation levels were relatively normal compared to the previous year's wetter month, though some areas experienced localized increases that contributed to floodwater mosquito activity. The combination of moderate rainfall and above-average temperatures created conditions favorable for mosquito development.

In July, increased rainfall, paired with high temperatures across Northern Illinois, triggered surges in mosquito populations. July delivered higher precipitation and temperatures compared to the previous year, accelerating mosquito development cycles and driving increases in both nuisance populations and West Nile virus vectors.

August continued the pattern with temperatures near seasonal averages but above-normal precipitation. Chicago recorded 5.03 inches of precipitation (0.78 inches above normal), while temperatures ran slightly cooler than normal. These conditions sustained elevated mosquito activity throughout the month.

September marked a dramatic shift, becoming one of the warmest and driest months on record. Chicago recorded only 0.49 inches of precipitation (2.70 inches below normal, tied for 7th driest) with temperatures 3.0 degrees above normal. The warm, dry conditions led to expanding drought conditions, with 74% of Illinois entering drought status by month's end.

October continued the drought trend with below-normal precipitation and cooling temperatures. The persistent dry conditions naturally reduced mosquito breeding habitats, though West Nile virus activity remained elevated through early October before seasonal declines began as cooler autumn weather took hold.

Below are the monthly recaps from the National Oceanic and Atmospheric Administration and National Weather Service.



June 2025 Review

July 1, 2025
4:36 PM

Warmer and Drier than Average

Chicago (O'Hare)

Avg. Temperature

74.2°

3.6° above normal

Tied 6th
Warmest

Precipitation

3.63"

0.47" below normal

Rockford

Avg. Temperature

73.2°

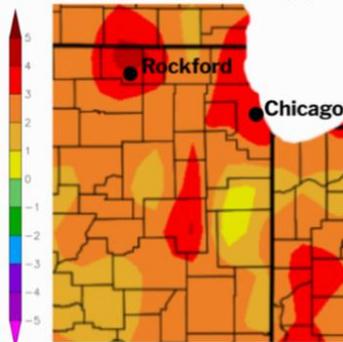
3.1° above normal

Precipitation

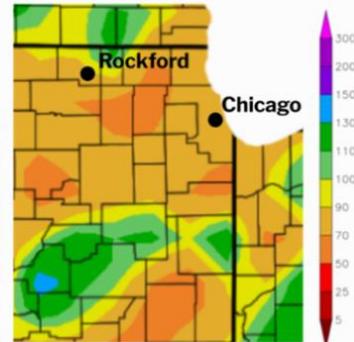
3.38"

1.85" below normal

Average Temperature
Departure from Normal (°F)



Precipitation
Percent (%) of Normal



July 2025 Review

August 1, 2025
1:00 PM

Warm, humid, and wet for most of the region

Chicago (O'Hare)

Avg. Temperature

77.5°

2.1° above normal

Precipitation

4.29"

0.58" above normal

Rockford

Avg. Temperature

76.2°

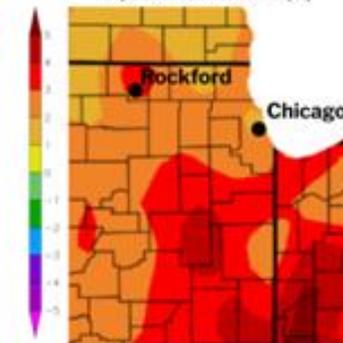
2.4° above normal

Precipitation

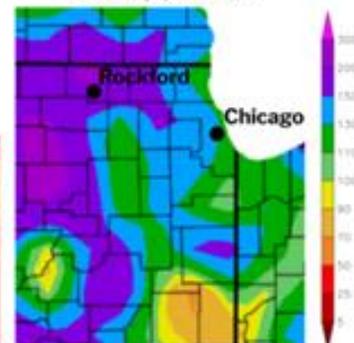
6.49"

2.68" above normal

Average Temperature
Departure from Normal (°F)



Precipitation
Percent (%) of Normal





August 2025 Review

September 2, 2025
7:00 AM

Generally near to slightly below normal temperatures and a mixed bag for rainfall

Chicago (O'Hare)

Avg. Temperature

73.3°

0.5° below normal

Precipitation

5.03"

0.78" above normal

Rockford

Avg. Temperature

70.6°

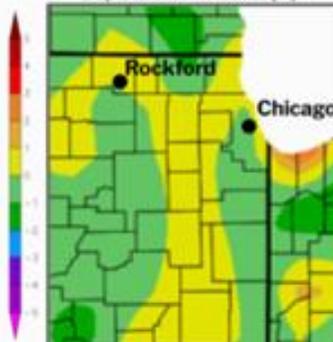
1.3° below normal

Precipitation

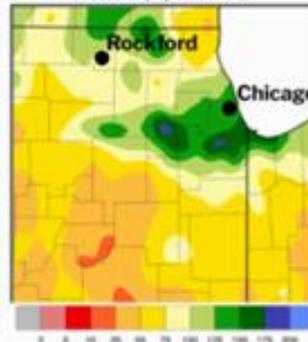
3.30"

0.89° below normal

Average Temperature
Departure from Normal (°F)



Precipitation
Percent (%) of Normal



September 2025 Review

October 1, 2025
2:40 PM

Mainly warm and dry conditions prevailed across the region.

Chicago (O'Hare)

Avg. Temperature

69.3°

3.0° above normal

Precipitation

0.49"

2.70" below normal

Tied 7th Driest

Rockford

Avg. Temperature

66.5°

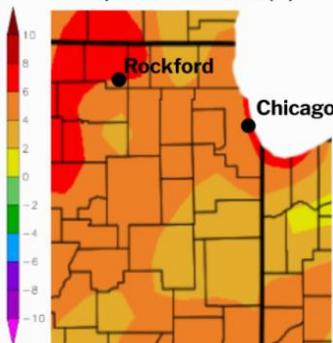
2.1° above normal

Precipitation

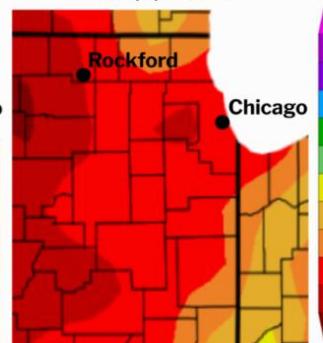
1.05"

2.57" below normal

Average Temperature
Departure from Normal (°F)



Precipitation
Percent (%) of Normal



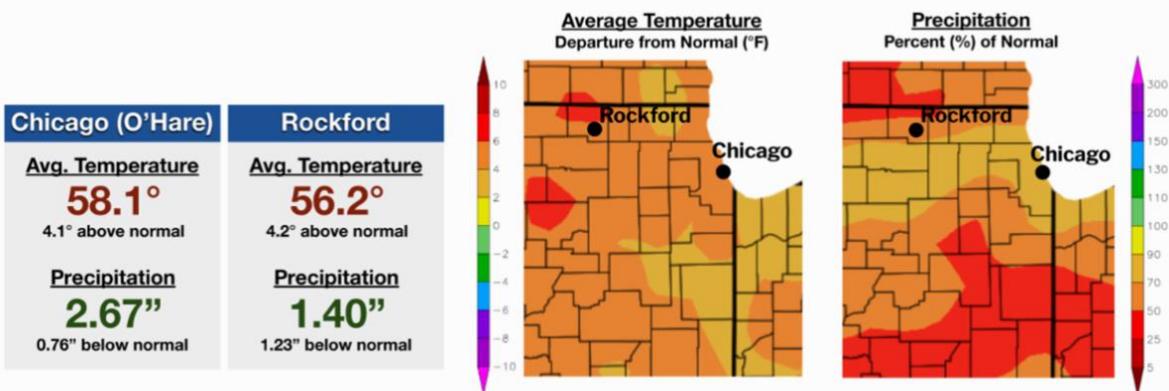


October 2025 Review

November 2, 2025

10:33 AM

Warmer and drier than our typical October



Maps courtesy of the High Plains Regional Climate Center



National Oceanic and Atmospheric Administration
U.S. Department of Commerce

National Weather Service
Chicago, IL

To Keep Up with the Latest Data, Use the Clarke Customer Portal

Clarke maintains and operates an online Customer Portal that program administrators can use to get up-to-date information on their mosquito management program.

Find **Floodwater Mosquito Brood Predictions** and **full monthly data** for the entirety of your program's season on the Clarke Customer Portal.

If you've forgotten your password, simply use the reset feature to regain access. Once logged in, select "Custom Reports" from the left menu, click "Run," choosing your account and the correct month, then "View Report."

[\[Step-by-step guide here\]](#)

[Clarke Customer Portal](#)

Mosquito Borne Disease Update

2025 West Nile Update

West Nile virus is primarily a mosquito-borne disease, which can cause West Nile encephalitis (swelling of the brain) and West Nile fever in humans. Though most humans infected will not show symptoms, those who develop West Nile virus risk debilitating effects and possibly death. While the most severe cases and the highest risk of West Nile occur traditionally in people over 50 years of age or with compromised immune systems, all people who spend time outside are at risk of contracting the virus. The disease also affects birds, horses and other animals, with higher mortality rates.

West Nile Virus has spread rapidly across North America since it was discovered in the Western hemisphere in 1999. Since its emergence, the virus has led to 58,682 human cases—including over 2,700 tragic fatalities—over the past 25 years. Given its prevalence in bird and mosquito populations, WNV has established itself as a significant annual threat during mosquito season.

US Cases of West Nile Virus: 2025

Nationwide, 2025 has seen approximately 1,564 total human disease cases of West Nile virus reported across 43 states, with 1,043 classified as neuroinvasive disease cases—the more severe form of the illness. This represents a 40% increase above normal levels for West Nile virus activity.

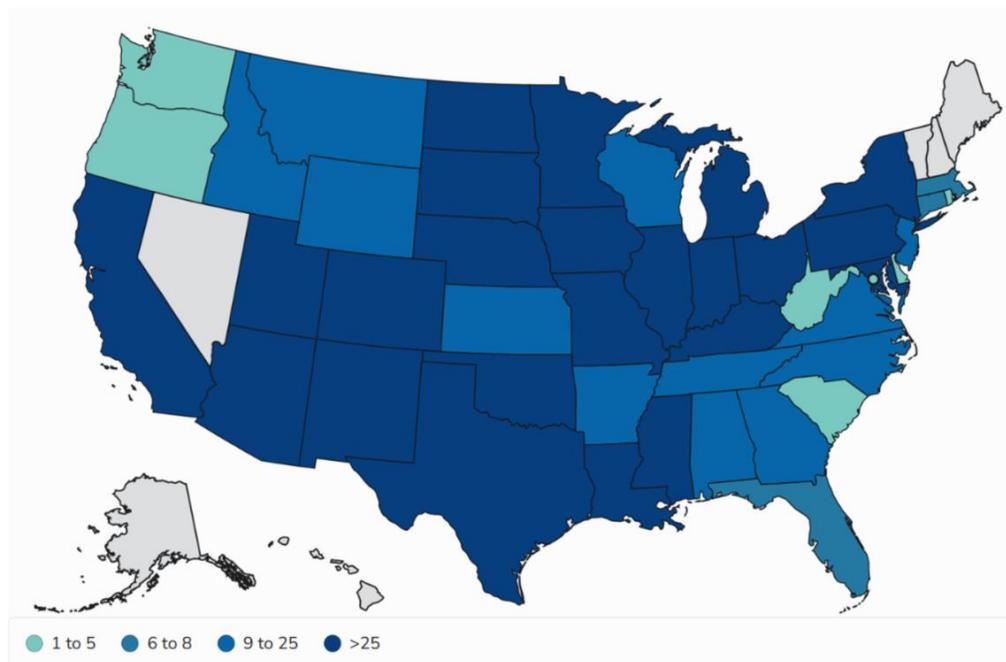


Figure 1: West Nile virus human disease cases reported by state of residence, 2025. Pulled 11/6/2025 via [ArboNET](#).

Illinois Cases of West Nile Virus

In Illinois, 2025 proved to be a particularly severe year for West Nile virus. As of October 3, 2025, the state reported 149 confirmed human cases, including 7 deaths, across 72 counties.

Mosquito surveillance detected 3,992 positive mosquito batches - a 23.3% positivity rate significantly higher than 2024's 18.4% - and 26 positive horses and other animals, though no positive birds were reported through the state monitoring system. This represents a substantial increase from 2024's total of 69 cases for the entire year.

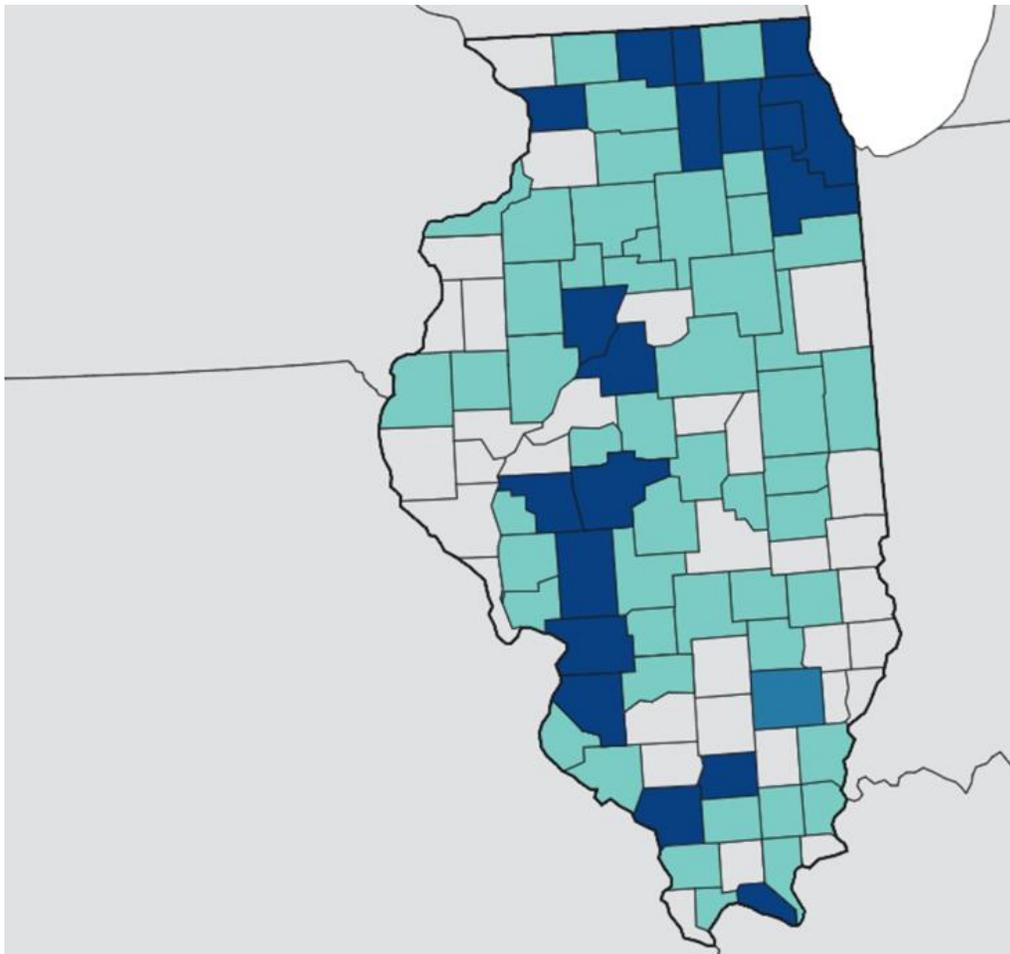


Figure 2: West Nile virus human and non-human activity by county, 2025. Pulled 11/6/2025 via [ArboNET](#).

County	American Crow	Blue Jay	Other Birds	Mosquito Batches	Horse	Other Mammals
BOND	0	0	0	3	0	0
BOONE	0	0	0	18	0	0
BUREAU	0	0	0	5	0	0
CARROLL	0	0	0	5	0	0
CHAMPAIGN	0	0	0	22	0	0
CHRISTIAN	0	0	0	3	0	0
CLAY	0	0	0	2	0	0
CLINTON	0	0	0	5	0	0
COLES	0	0	0	0	2	0
COOK	0	0	0	2958	0	0
DEKALB	0	0	0	17	0	0
DOUGLAS	0	0	0	0	12	0
DUPAGE	0	0	0	219	0	0
EFFINGHAM	0	0	0	0	1	0
FAYETTE	0	0	0	1	0	0
FORD	0	0	0	23	0	0
FRANKLIN	0	0	0	2	0	0
FULTON	0	0	0	1	0	0
GALLATIN	0	0	0	3	0	0
GREENE	0	0	0	9	0	0
GRUNDY	0	0	0	22	0	0
HANCOCK	0	0	0	6	0	0
HENRY	0	0	0	7	0	0
JACKSON	0	0	0	1	0	0
JASPER	0	0	0	3	0	0
JERSEY	0	0	0	2	0	0
KANE	0	0	0	21	0	0
KANKAKEE	0	0	0	53	0	0
KENDALL	0	0	0	16	0	0
KNOX	0	0	0	1	0	0
LAKE	0	0	0	177	0	0
LASALLE	0	0	0	8	0	0
LEE	0	0	0	5	0	0
LIVINGSTON	0	0	0	3	0	0
LOGAN	0	0	0	1	0	0
MACON	0	0	0	25	0	0
MACOUPIN	0	0	0	4	1	0
MADISON	0	0	0	26	0	0
MARSHALL	0	0	0	6	0	0
MASSAC	0	0	0	1	0	0
MCDONOUGH	0	0	0	12	1	0
MCHENRY	0	0	0	50	0	0
MCLEAN	0	0	0	14	0	0
MENARD	0	0	0	6	0	0
MONROE	0	0	0	1	0	0
MONTGOMERY	0	0	0	38	0	0
MORGAN	0	0	0	5	0	0
MOULTRIE	0	0	0	0	9	0

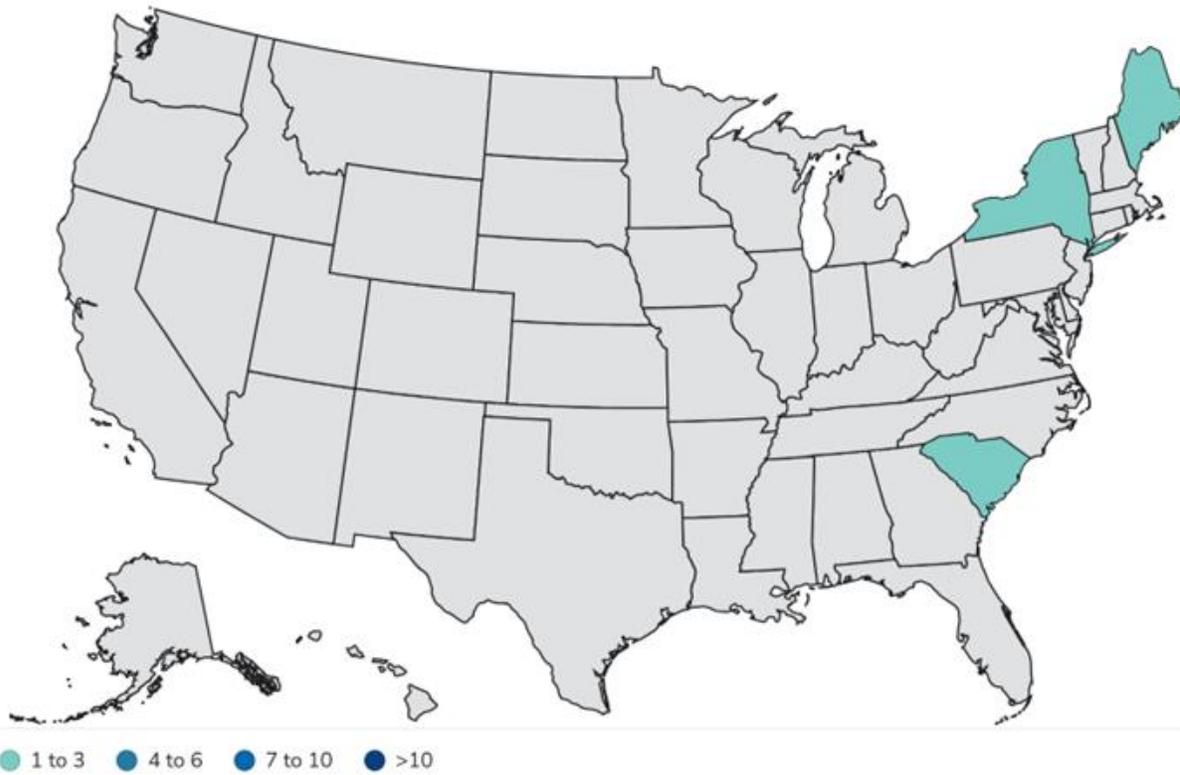


Figure 4: EEE virus human disease cases reported by state of residence, 2025. Via [ArboNet](#). Retrieved 11/6/2025.

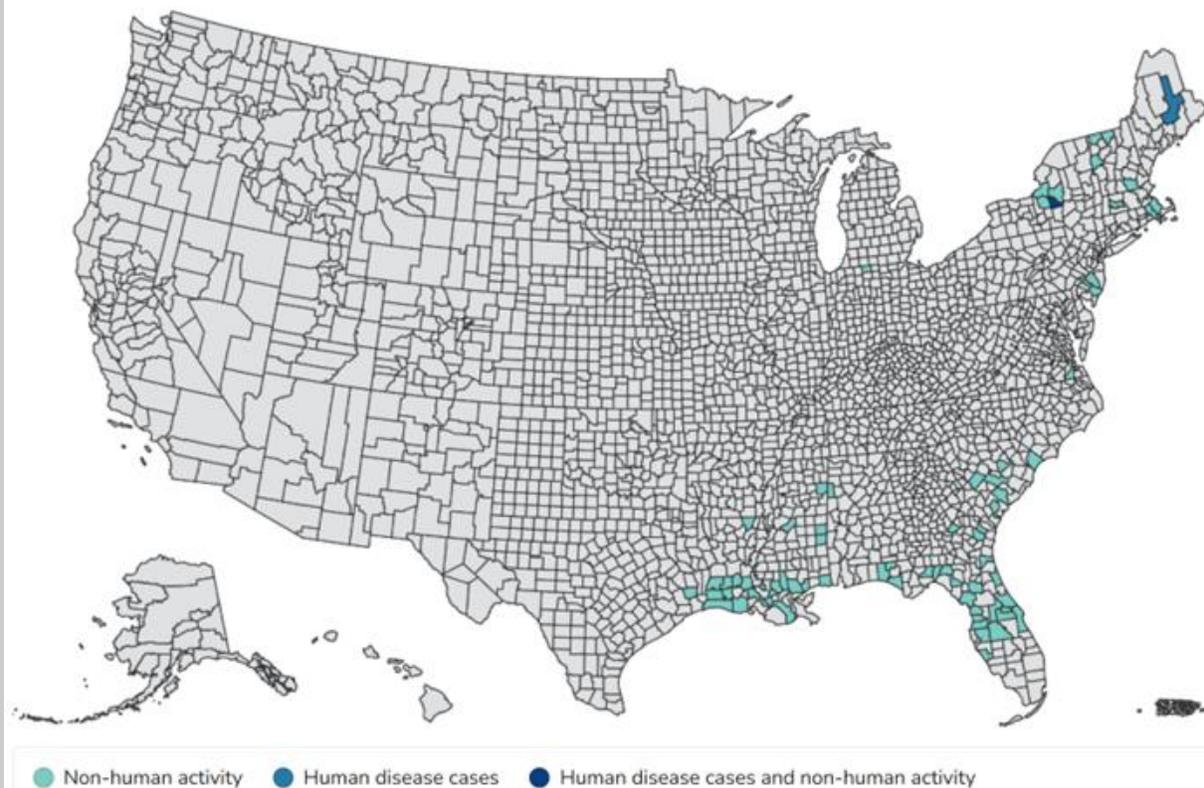


Figure 5: EEE virus human and non-human activity by county of residence, 2025. Via [ArboNet](#). Retrieved 11/6/2025.

2025 Zika Update

Zika virus is a mosquito-borne disease that is transmitted primarily by the *Aedes aegypti* mosquito and through sexual transmission. While Zika symptoms are generally mild in adults (fever, rash, joint pain, conjunctivitis), pregnant women who contract Zika virus can pass the virus to their unborn children, increasing the risks of serious birth defects like microcephaly.

When Zika debuted in the US, more than 5,100 travel-related cases of Zika were confirmed nationwide, including 139 locally transmitted cases of transmission in areas of south Florida in 2016. Since that time, cases have steadily decreased. The last cases of local Zika transmission by mosquitoes in the continental United States were in Florida and Texas in 2016-17.

Illinois does not have a significant population of *Aedes aegypti* mosquitoes, so local transmission risk is small.

Year	US States Locally Acquired	US States Travel Associated	US Territories Locally Acquired	US Territories Travel Associated
2025	0	4	1	0

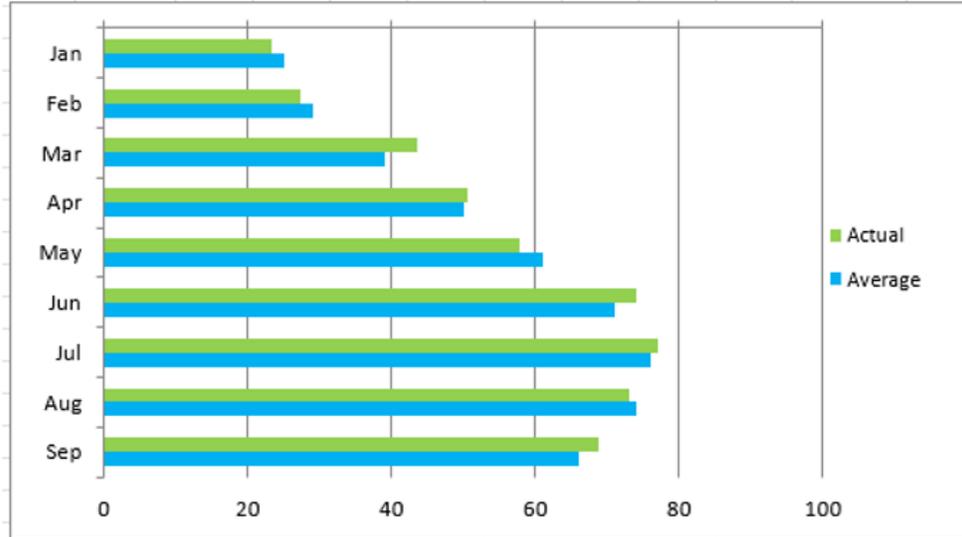
Figure 6:2025 U.S. Zika cases reported to ArboNET. Retrieved 11/6/2025

Climatology

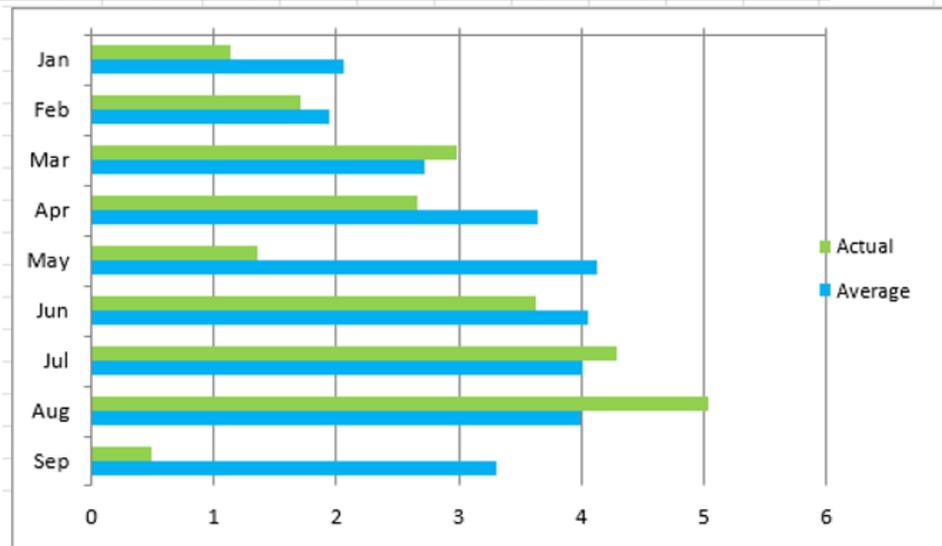
Weather dramatically impacts mosquito breeding and population dynamics. Rainfall determines whether floodwater mosquito eggs will hatch, while fierce storms can wash away egg rafts of container-breeding species. Temperature variations affect both mosquito activity levels and larval development rates. During hot, dry periods, dwindling water sources concentrate both mosquitoes and hosts, amplifying virus transmission and increasing the percentage of infected vectors in the population.

2025 O'Hare International Airport (Chicago) Weather Survey

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Actual	23.32	27.39	43.64	50.63	57.73	73.95	77.16	73.09	68.85
Average	25	29	39	50	61	71	76	74	66

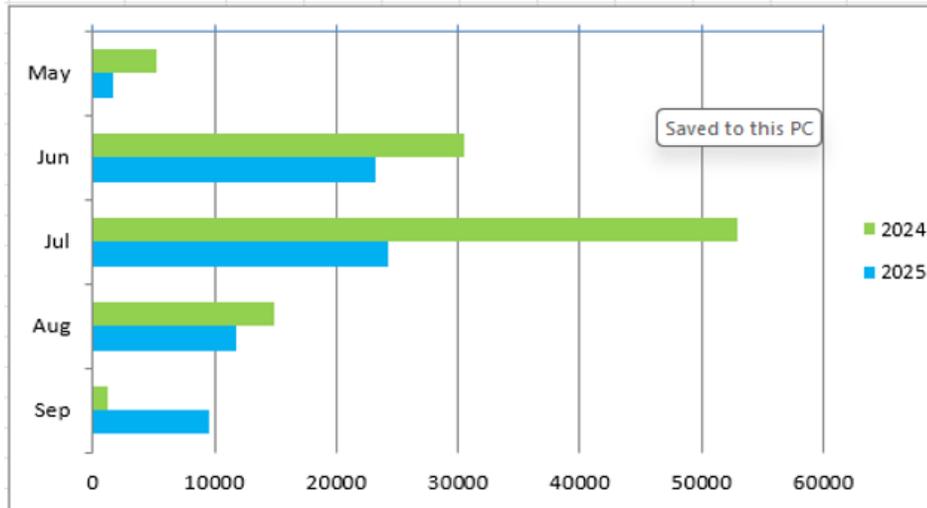


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Actual	1.14	1.7	2.99	2.66	1.35	3.63	4.29	5.03	0.49
Average	2.06	1.94	2.72	3.64	4.13	4.06	4.01	3.99	3.31

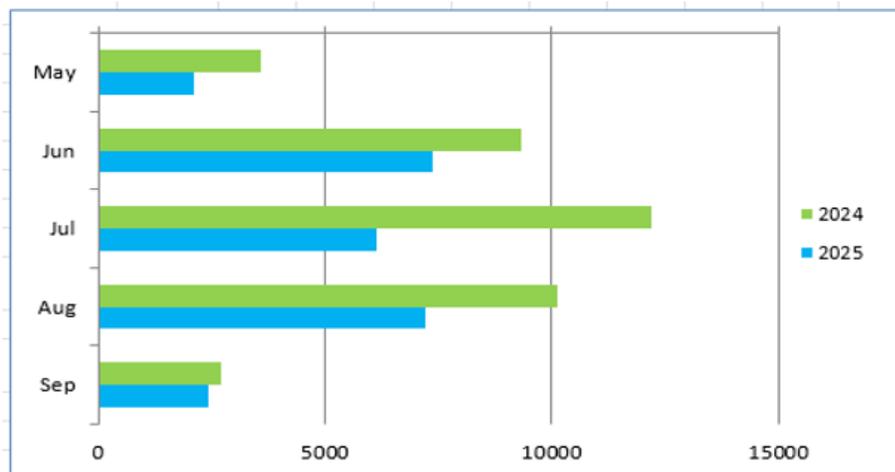


Aedes Vexans vs. *Culex pipiens*

<i>vexans</i>					
	May	Jun	Jul	Aug	Sep
2025	1622	23284	24267	11824	9565
2024	5304	30493	52870	14948	1227



<i>culex</i>					
	May	Jun	Jul	Aug	Sep
2025	2096	7388	6137	7193	2432
2024	3600	9324	12184	10126	2727



Surveillance

The following table summarizes the species composition from the light trap network operating in Northern Illinois.

Light Trap Species Summary				
Species	Female	% Female	Male	% Male
<i>Aedes albopictus</i>	19	0.02%	2	0.01%
<i>Aedes cinereus</i>	221	0.21%	74	0.27%
<i>Aedes Misc spp</i>	549	0.51%	234	0.84%
<i>Aedes vexans</i>	65507	61.42%	14689	52.63%
<i>Anopheles barberi</i>	1	0.00%	1	0.00%
<i>Anopheles misc spp</i>	100	0.09%	53	0.19%
<i>Anopheles punctipennis</i>	1955	1.83%	225	0.81%
<i>Anopheles quadrimaculatus</i>	6910	6.48%	310	1.11%
<i>Anopheles walkeri</i>	10	0.01%	0	0.00%
<i>Coquillettidia perturbans</i>	1201	1.13%	149	0.53%
<i>Culex erraticus</i>	2192	2.06%	239	0.86%
<i>Culex misc spp</i>	11061	10.37%	6503	23.30%
<i>Culex pipiens</i>	8160	7.65%	3330	11.93%
<i>Culex restuans</i>	5889	5.52%	1054	3.78%
<i>Culex salinarius</i>	53	0.05%	3	0.01%
<i>Culex tarsalis</i>	11	0.01%	0	0.00%
<i>Culex territans</i>	342	0.32%	108	0.39%
<i>Culiseta inornata</i>	89	0.08%	34	0.12%
<i>Culiseta melanura</i>	13	0.01%	35	0.13%
<i>Culiseta misc spp</i>	3	0.00%	12	0.04%
<i>Misc genus / spp</i>	231	0.22%	104	0.37%
<i>No catch</i>	0	0.00%	0	0.00%
<i>Ochlerotatus canadensis</i>	12	0.01%	5	0.02%
<i>Ochlerotatus fitchii</i>	117	0.11%	108	0.39%
<i>Ochlerotatus grossbecki</i>	84	0.08%	38	0.14%
<i>Ochlerotatus hendersoni</i>	5	0.00%	3	0.01%
<i>Ochlerotatus japonicus</i>	437	0.41%	202	0.72%
<i>Ochlerotatus stimulans</i>	0	0.00%	1	0.00%
<i>Ochlerotatus triseriatus</i>	135	0.13%	114	0.41%
<i>Ochlerotatus trivittatus</i>	434	0.41%	52	0.19%
<i>Orthopodomyia signifera</i>	45	0.04%	2	0.01%
<i>Psorophora ciliata</i>	6	0.01%	1	0.00%
<i>Psorophora cyanescens</i>	1	0.00%	0	0.00%
<i>Psorophora ferox</i>	9	0.01%	7	0.03%
<i>Psorophora howardii</i>	92	0.09%	23	0.08%
<i>Psorophora misc spp</i>	1	0.00%	1	0.00%
<i>Uranotaenia sapphirinia</i>	766	0.72%	193	0.69%
Total	106661	100.00%	27909	100.00%

