



Oswego Township

August 2024 - Status Report

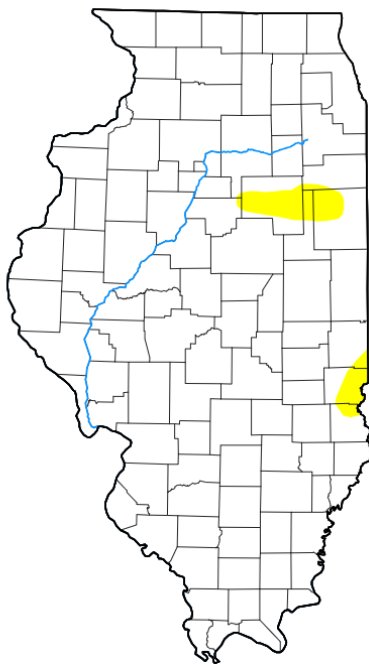
SEASON PERSPECTIVE

Introduction. The objectives of the program are to protect the public health by controlling nuisance mosquitoes, reducing the potential of mosquito-borne disease transmission, and providing a comfortable and healthy atmosphere for district residents.

Weather conditions critically affect the seasonal mosquito population. Excessive rainfall periods trigger hatches of floodwater mosquitoes (*Aedes vexans*), the dominant annoyance species in northern Illinois that has a flight range of 15 to 20 miles. The other target species is the northern house mosquito (*Culex pipiens*), the primary vector of West Nile virus (WNV) that flourishes under stagnant water and drought conditions.

2024 Chicagoland Soil Moisture Conditions Rebound and Improve

The following July 18th Illinois Drought Monitor map shows soil moisture improvement throughout Illinois and the Chicagoland area, compared to mid-June moderate drought conditions:



Map released: Thurs. August 1, 2024

Data valid: July 30, 2024 at 8 a.m. EDT

Intensity

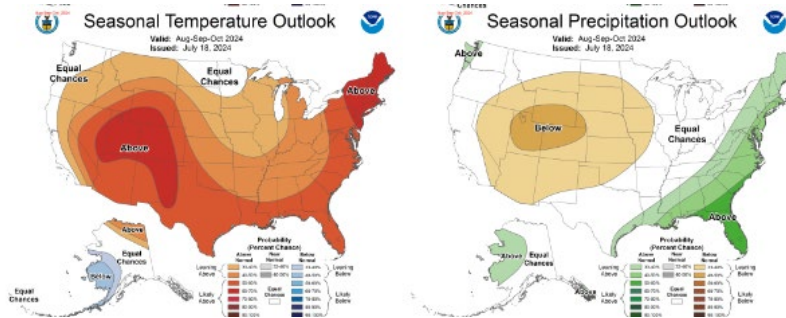
- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

Between July 1st and 15th at O'Hare Airport a series of six (6) heavy rains totaling 5.20 inches triggered floodwater mosquito brood hatches to peak during the last half of the month. The



Clarke network of 100 New Jersey light traps continues to collect the largest catches of floodwater mosquitoes seen in many years. The impact of the excessive July rainfall was reflected in the number of citizen inquiries on the Clarke “Biteline” system through July 31st: 323 annoyance calls and 57 standing water reports.

The National Weather Service 30-day outlook:



The seasonal outlook for August thru October from the National Weather Service is for continued above normal temperatures and near normal rainfall.

West Nile virus (WNV) is starting to spike in Illinois. The following Illinois Department of Public Health news release was issued on July 17th announcing the first human case in Cook County:



NEWS RELEASE

FOR IMMEDIATE RELEASE:

August 27, 2024

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First Illinois West Nile Virus Death of 2024 is Reported by IDPH in Lake County

CHICAGO – The Illinois Department of Public Health (IDPH) announced the first 2024 death of an Illinois resident with West Nile virus (WNV). The individual, who was in their 80’s and lived in Lake County, had an onset of symptoms of WNV in mid-August and died soon after. IDPH is also reporting nine non-fatal cases of WNV confirmed to date this year.

“Sadly, Illinois is reporting our first death of the year attributed to West Nile virus,” said IDPH Director Dr. Sameer Vohra. “This death – and the six that occurred last year in Illinois - are a stark reminder that West Nile virus poses a serious risk, especially to older people and those with weakened immune systems. This is why while warm weather continues and mosquitoes are breeding, we should all take steps to ‘Fight the Bite.’ Please protect yourself and your loved ones by reducing exposures, repelling insects with clothing and repellents, and reporting locations at high risk for producing mosquitoes.”

Of the nine other human cases in 2024 to date, the majority were reported from Cook County, with others in DuPage, Will, Winnebago and Tazewell counties.

The first WNV-related death in Illinois in 2023 also had an onset of symptoms in August. There were six deaths from WNV confirmed in the state in 2023 and an additional 119 non-fatal cases reported (although human cases are underreported). The youngest person to report a case of West Nile virus in Illinois last year was 33 years old, while the median age of human cases was 67.

West Nile virus is transmitted through the bite of a *Culex* mosquito, commonly called a typical mosquito, which has picked up the virus by feeding on an infected bird. Common symptoms of WNV include fever, nausea, headache and muscle aches. Symptoms may last from a few days to a few weeks. Four out of five people infected with West Nile virus will not show any symptoms. However, in rare cases, severe illness can occur, including brain infections such as meningitis or encephalitis and paralysis or even death. People older than 50 and immunocompromised individuals are at higher risk for severe illness from West Nile virus.

There is no specific treatment for WNV nor is there a vaccine at present, therefore it is critically important that people minimize their risk of being infected by it.

Find us on Facebook at [Facebook.com/IDPH.Illinois](https://www.facebook.com/IDPH.Illinois) or follow us on Twitter @IDPH

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IDPH encourages the public to *Fight the Bite* and take steps to prevent WNV by practicing the three “R’s” – reduce, repel, and report:

- **REDUCE** - make sure doors and windows have tight-fitting screens. Repair or replace screens that have tears or other openings. Try to keep doors and windows shut. Eliminate, or refresh each week, all sources of standing water where mosquitoes can breed, including water in bird baths, ponds, flowerpots, wading pools, old tires, and any other containers.
- **REPEL** - when outdoors, wear shoes and socks, long pants and a light-colored, long-sleeved shirt, and apply an EPA-registered insect repellent that contains DEET, picaridin, oil of lemon eucalyptus, or IR 3535 according to label instructions. The CDC does not recommend use of products containing oil of lemon eucalyptus or para-menthane-diol on children under 3. Consult a physician before using repellents on children under 3.
- **REPORT** – report locations where you see water sitting stagnant for more than a week such as roadside ditches, flooded yards, and similar locations that may produce mosquitoes. The local health department or city government may be able to add larvicide to the water, which will kill any mosquito larvae.

Last year, 67 counties in Illinois reported positive WNV mosquitoes, birds, humans and/or horses. So far in 2024, there have been 2,113 positive mosquito batches, 29 positive birds, and one positive horse from 57 counties. This year, the first mosquito batches to test positive for WNV were reported May 14 in Cook and Morgan Counties.

[Surveillance for West Nile virus in Illinois](#) involves reporting and investigation of individuals with West Nile virus symptoms and clinical laboratory testing. Environmental surveillance includes laboratory testing on mosquito batches, dead birds, as well as testing sick horses. People who observe a sick or dying bird should contact their local health department, which can determine if the bird will be picked up for testing.

Additional information and data on WNV in Illinois can be found at: [West Nile virus](#).

In late July, the Clarke surveillance team saw an increase in WNV-positive mosquito reports. In northern Cook County, the North Shore Mosquito Abatement District reported 26.7% of their WNV samples were positive during the week of July 17th, 33.4% positive during the week of July 24th, and 53.0% positive during the week of July 31st. In addition, WNV human cases have been announced in Batavia and Villa Park.

Operations plan. As a result of this weather pattern, intense floodwater mosquito (*Aedes vexans*) annoyance is anticipated into August. With the spike in WNV-positive reports and the first Illinois human WNV case announcement on July 17th, the northern house mosquito (*Culex pipiens*) is anticipated to cause an increased public health risk in August. Accordingly, Clarke operations will focus on floodwater and permanent water habitats for the control of both target species. The booster round of street catch basin applications are underway, as well as the final helicopter pre-hatch round. Truck ULV adulticide applications will be recommended as warranted by surveillance data for nuisance and potential risk of WNV transmission.



Floodwater Mosquito Brood Prediction

The floodwater mosquito (*Aedes vexans*) is the key nuisance species in the Chicagoland area. Floodwater mosquito population hatches, or broods, are triggered by significant rainfall events. The Clarke Brood Prediction Model calculates peak annoyance periods based on rainfall and temperature data collected from weather stations in your area.

Weather Station Name	Rain Date	Rain Amount	Brood Prediction Date
Will Co.	06/24/2024	1.27	07/08/2024
Will Co.	06/25/2024	1.56	07/09/2024
Will Co.	07/09/2024	0.54	07/23/2024
Will Co.	07/14/2024	1.18	07/28/2024
Will Co.	07/15/2024	0.89	07/29/2024
Will Co.	08/05/2024	0.87	08/19/2024
Will Co.	08/16/2024	0.75	08/30/2024
Will Co.	08/27/2024	0.52	09/10/2024

OPERATIONS UPDATE

Services Performed - July & Early August 2024:

Service Item	Start Date
Natular XRT CB Bike	07/17/2024
Biomist 3+15 Truck ULV	07/29/2024
Biomist 3+15 Truck ULV	08/23/2024

Upcoming Operations 2024

Service Item	Number of Treatments
Targeted Site Larval Insp Serv	1

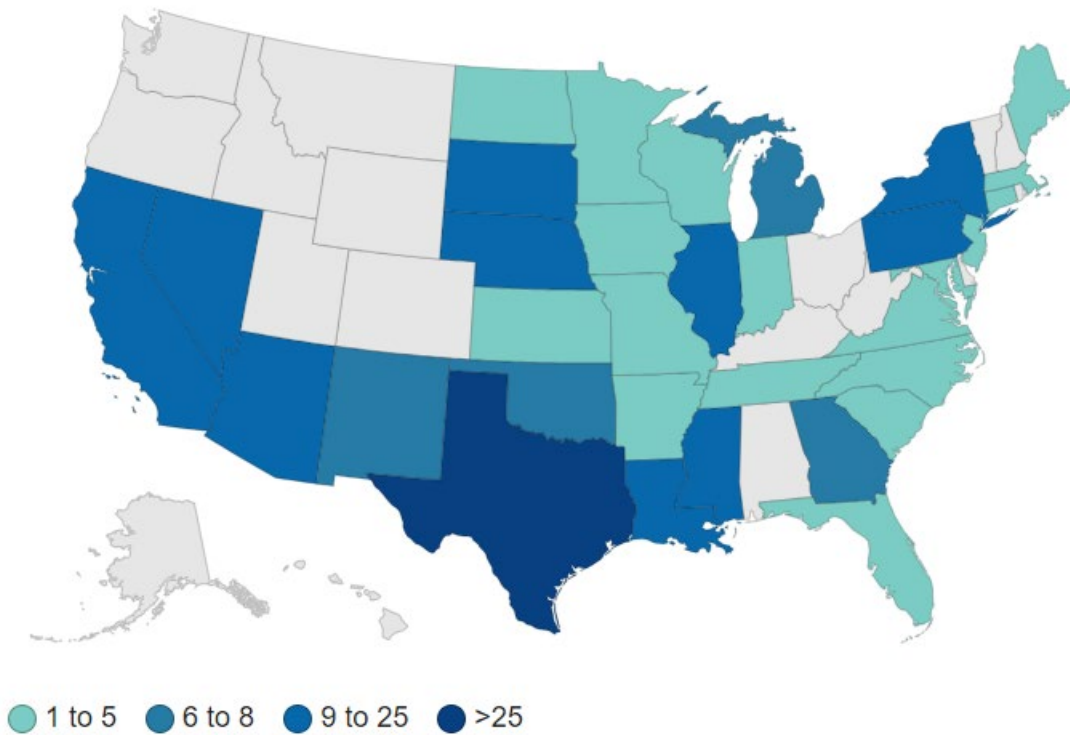


MOSQUITO-BORNE DISEASE UPDATE

West Nile Virus (WNV)

2024 – USA. As of August 28th, human WNV cases have been reported to the Centers for Disease Control (CDC) in the following states:

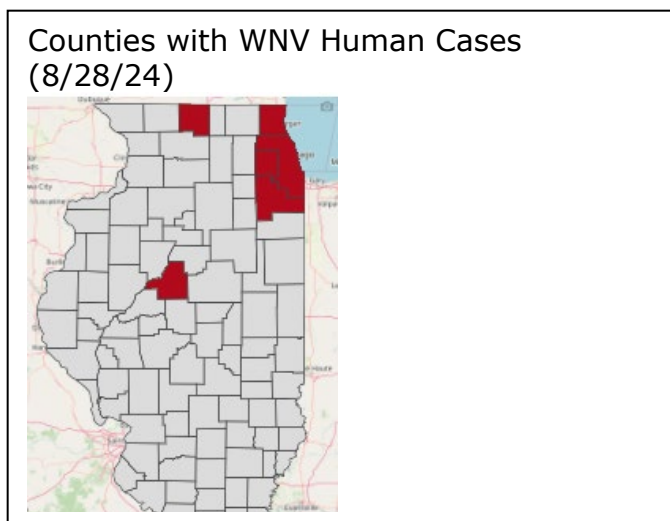
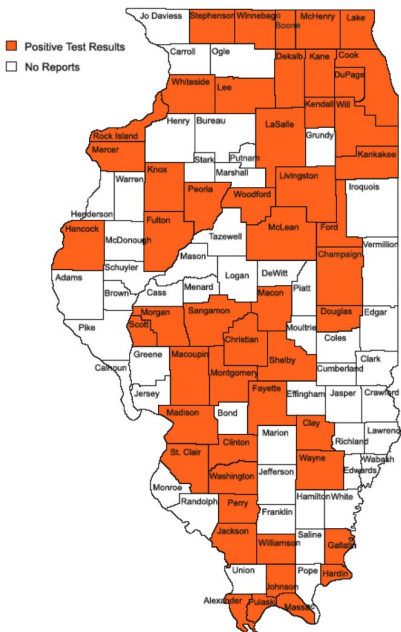
West Nile virus human disease cases reported by state of residence, 2024





2024 Illinois. As of August 9th, the Illinois Department of Public Health (IDPH) has confirmed 1,240 batches of mosquitoes to test positive for West Nile virus in Illinois in the following 52 highlighted counties:

	Number Collected in all Counties	# WNV Positives	% WNV Positives
2024 Data as of August 9			
2024 Mosquito Surveillance Samples	9,407	1,240	13.2%
2024 Bird Surveillance Samples	127	25	19.7%
2024 WNV Positive Counties	52		
2024 Human Cases as of August 9	5		
2023 Historical Data as of August 9 for Comparison			
2023 Mosquito Surveillance Samples	10,999	1,540	14.0%
2023 Bird Surveillance Samples	114	17	14.9%
2023 WNV Positive Counties	44		
2023 Total Human Cases	119		
2012 Historical Data as of August 9 for Comparison			
2012 Mosquito Surveillance Samples	12,348	3,037	24.6%
2012 Bird Surveillance Samples	427	72	16.9%
2012 WNV Positive Counties	37		
2012 Total Human Cases	290		





COUNTY	CASES
Cook	8
DuPage	4
Lake	3
Tazewell	1
Will	1
Winnebago	1
Total	18



Illinois Department of Public Health

WEST NILE VIRUS

[West Nile Home](#)
[News Releases](#)
[Public Information](#)
[Health Care Provider Information](#)
[Surveillance](#)
[Dead Bird Collection](#)
[Photo Gallery](#)
[Other Links](#)

2024 Illinois West Nile Virus

Numbers at a Glance

Year:

- 18** human cases
- 1** human deaths
- 65** years - median age of human cases*
- 23** years - youngest human case*
- 92** years - oldest human case*
- 59** counties with positive humans, birds, mosquitoes and/or horses
- 29** positive birds
- 2238** positive mosquito batches
- 1** positive horses and other animals

Last Updated 8/28/2024

* This data will be reported when 10 cases have been identified.