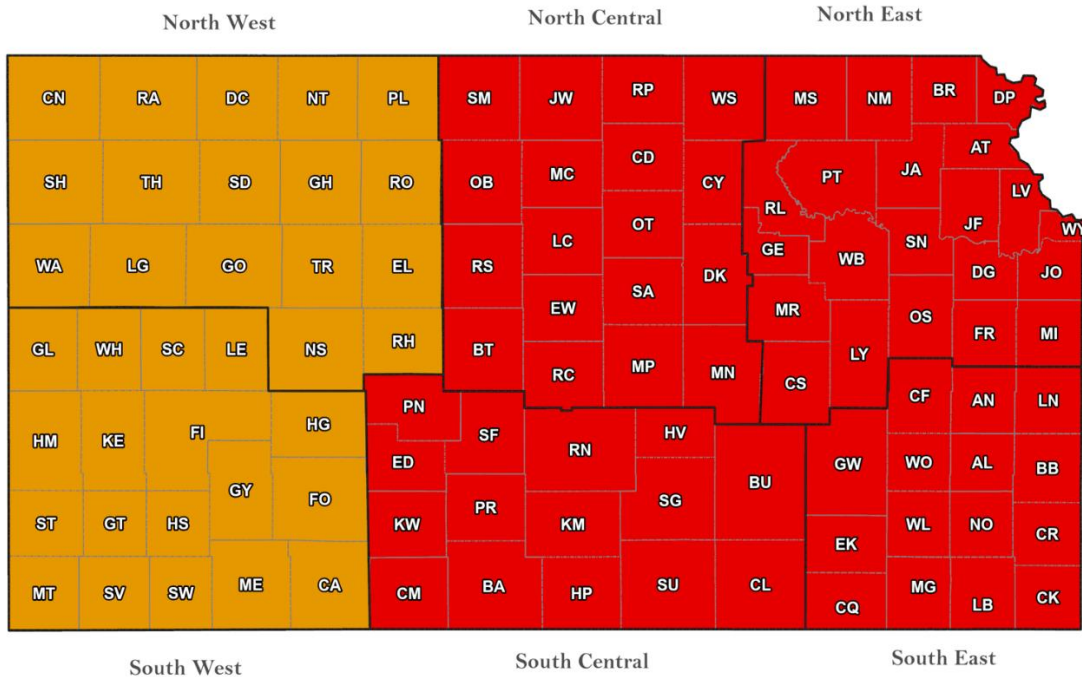


# Kansas West Nile Virus Weekly Surveillance and Transmission Risk Report

Week Ending August 13, 2022 (MMWR Week 32)



## RISK LEVEL



## Key to West Nile Virus Risk Levels in Kansas

Risk	What it Means	What You Can Do
Minimal	Mosquito surveillance is conducted mid-May – mid-October however infection with WNV is unlikely. This does not mean the risk is zero.	<b>To Prepare:</b> Know your risk – check regularly at <a href="http://www.kdheks.gov/epi/arthoviral_disease.htm">http://www.kdheks.gov/epi/arthoviral_disease.htm</a> <b>Mosquito-Proof Your Home:</b> <ul style="list-style-type: none"> <li>Keep screens on windows and doors in good repair.</li> <li>Use air conditioning if you have it.</li> <li><b>DRAIN</b> - Reduce number of mosquitoes around your home by emptying standing water from flowerpots, gutters, buckets, pool covers, pet water dishes, discarded tires, and birdbaths on a regular basis.</li> </ul>
Low	The mosquitoes that carry WNV is present in small numbers. There is a low probability of being bitten by an infected mosquito.	<b>To Prevent:</b> <ul style="list-style-type: none"> <li>Wear mosquito repellent between dusk to dawn</li> <li>Wear long sleeves and long pants from dusk to dawn</li> <li>Use mosquito netting on baby carriages and playpens</li> </ul>
Moderate	There is a moderate probability of being bitten by a WNV mosquito.	<b>To Prevent: add to previous level</b> <ul style="list-style-type: none"> <li>Wear mosquito repellent</li> <li>Wear long sleeves and long pants when weather permits</li> <li>Use mosquito netting on baby carriages and playpens</li> <li>Dump standing water twice weekly</li> </ul>
High	This week has been identified as 'high risk' of being bitten by a WNV mosquito based on: high number of WNV mosquitoes identified and high number of historical human cases of WNV.	<b>To Prevent: add to previous level</b> <ul style="list-style-type: none"> <li>People over 50 or those who are immune compromised may consider adjusting outdoor activity to avoid peak mosquito hours (from dusk to dawn).</li> </ul>

## **Methods for Risk Assessment**

We utilize three factors in our risk assessment model; temperature, mosquito surveillance data, and human cases of WNV, however, for the present risk assessment model, mosquito surveillance data is not utilized in the western regions. Each factor has set benchmarks and each benchmark is assigned a value. The values from these three categories are averaged. The average rating is assigned a WNV risk level for each week. For the present, WNV surveillance season mosquito surveillance data is not utilized in the western regions for our risk assessment model. The three factors are as follows:

- High-risk environmental conditions include above-normal temperatures with or without above-normal rainfall. We use the average daily temperature during the prior 2 weeks as our benchmark.
- *Culex* species of mosquitoes serve as the main source of WNV transmission to people and horses. Relative abundance of *Culex* species mosquitoes compared to the same week in the previous year and the number of *Culex* species mosquitoes are evaluated each week. Greater than 40 *Culex* species mosquitoes collected in a week will also increase this factor to its maximum value.
- Number of human cases of WNV each week based on the average number of cases in the previous five years.

For more information on arboviral disease surveillance in Kansas, visit our website at;

<https://www.kdhe.ks.gov/1519/West-Nile-Virus-Risk-Level-Surveillance-> or contact the Kansas Department of Health and Environment's Infectious Disease Epidemiology and Response section at 1-877-427-7317 or e-mail at [kdhe.epihotline@ks.gov](mailto:kdhe.epihotline@ks.gov).