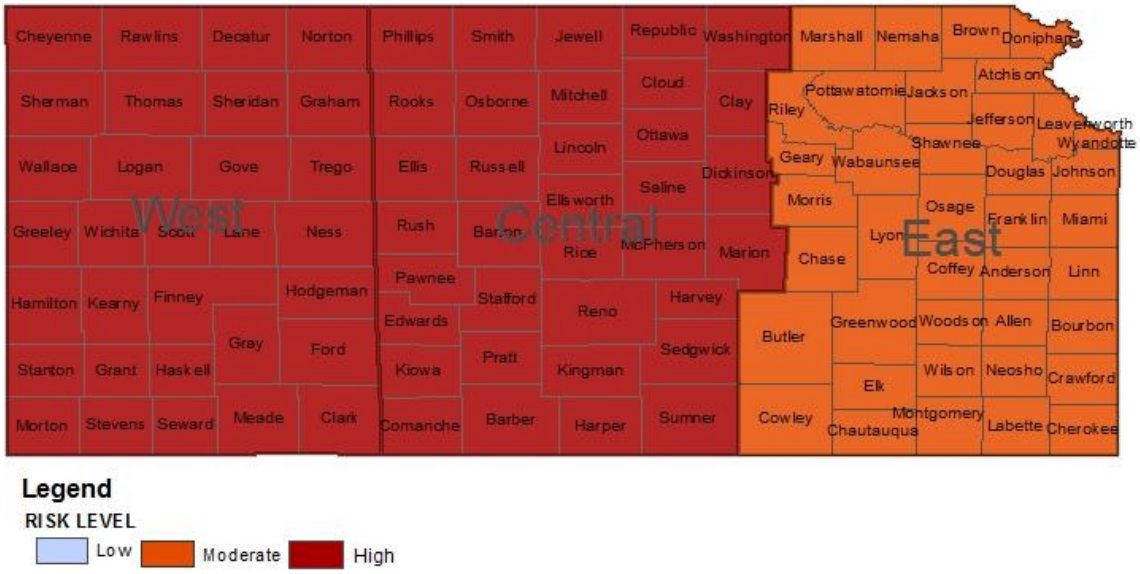
Kansas West Nile Virus (WNV) Weekly Surveillance and Transmission Risk Report

Week Ending June 23, 2017 (Week 5)

West Nile virus Transmission Risk Level by Region*



***West Nile Virus Risk**

Minimal – The mosquito species that carries WNV has not been detected. This does not mean the risk is zero.

Low – The mosquito species that carries WNV has been detected. There is a low probability of being bitten by an infected mosquito.

Moderate – At least one human cases of WNV has been reported to KDHE. There is a moderate probability of being bitten by an infected mosquito.

High – High numbers of WNV positive mosquitoes have been detected. There is an increased and high probability of being bitten by an infected mosquito.

Kansas Department of Health and Environment

What You Can Do

To Prepare:

- Know your risk – check regularly at http://www.kdheks.gov/epi/arboviral_disease.htm
- Mosquito-Proof Your Home:
  - Keep screens on windows and doors in good repair.
  - Use air conditioning if you have it.
  - DRAIN - 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.

To Prevent:

- Avoid Mosquito Bites
  - DEET – When outdoors wear mosquito repellent between dusk to dawn. Repellents containing DEET, picaridin, IR3535, and some oil of lemon eucalyptus and para-menthane-diol products provide longer-lasting protection. Be sure to read the label instructions
  - DRESS – When weather permits wear long sleeves, long pants, and socks from dusk to dawn (peak WNV mosquito biting hours).
  - People over 50 or those who are immune compromised may consider adjusting outdoor activity to avoid peak mosquito hours (from dusk to dawn) in high risk areas.

Highlights this week:

- Weekly mosquito surveillance being performed in Reno, Sedgwick, and Shawnee counties. Bi-weekly mosquito surveillance being performed in Johnson County.
- No West Nile virus (WNV) positive mosquitoes were identified this week.
- Three WNV human case investigation is in progress.
- One case of WNV in humans has been confirmed in Barton County.
- No veterinary cases of WNV were identified this week.

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Mosquito Surveillance Results, Week Ending June 23, 2017 (Week 5)

Table 1: Total Mosquitoes and Culex Spp. Mosquitoes Captured by Date and Region in Kansas, 2017

	WEST & CENTRAL						EAST				
	Sedgwick			Reno			Shawnee			Johnson*	
Week Ending, 2017	Total Mosquitoes	*Culex spp.*	Two-Week Mean, *Culex spp.*	Total Mosquitoes	*Culex spp.*	Two-Week Mean, *Culex spp.*	Total Mosquitoes	*Culex spp.*	Two-Week Mean, *Culex spp.*	Total Mosquitoes	*Culex spp.*
5/17	48	24	—	161	89	—	18	9	—	830	10
5/24	81	24	24	1206	966	527.5	21	4	6.5	—	—
5/31	125	45	34.5	157	98	532	176	10	7	249	2
6/7	105	4	24.5	137	55	77.5	527	36	23	—	—
6/14										123	35

Evaluation of surveillance data from 2013 & 2014 revealed a strong correlation between the two-week mean Culex prevalence and human cases that occurred in Sedgwick County, and the entire state of Kansas, two and three weeks later. When the Culex spp. two-week mean is over 40, human cases may be expected in the subsequent weeks.

**Two-week Culex spp. mean is not calculated for Johnson County due to biweekly trapping.*

West Nile Virus Human Cases, 2017

Table 2: West Nile Virus Surveillance in Humans, 2017 (as of week ending June 16, 2017)

County	Number of Cases
Barton	1

**Data from individual traps are used to guide mosquito control efforts. Data from a trap may be excluded when assigning a risk level to a region if only one location within a county has excessively high numbers. We will work with the county and city to provide recommendations on mosquito control efforts using the mosquito surveillance data.*

For more information on arboviral disease surveillance in Kansas call 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.

Kansas Department of Health and Environment