



2026 NEBRASKA MOSQUITO-BORNE SURVEILLANCE REPORT

NEBRASKA DEPARTMENT OF HEALTH AND
HUMAN SERVICES

VECTOR-BORNE DISEASE PROGRAM

CDC WEEKS 29 & 30:
July 19 – August 1, 2026

****All Data is Provisional****

Acronyms Used In This Report

- WNV = West Nile virus
- SLE = St. Louis Encephalitis virus
- WEE = Western Equine Encephalitis virus
- CVV = Cache Valley virus
- JCV = Jamestown Canyon virus
- LACV = La Crosse Encephalitis virus
- IR = Infection Rate
- VI = Vector Index



Credit: CDC, NCEZID-DVBD

SURVEILLANCE SUMMARY

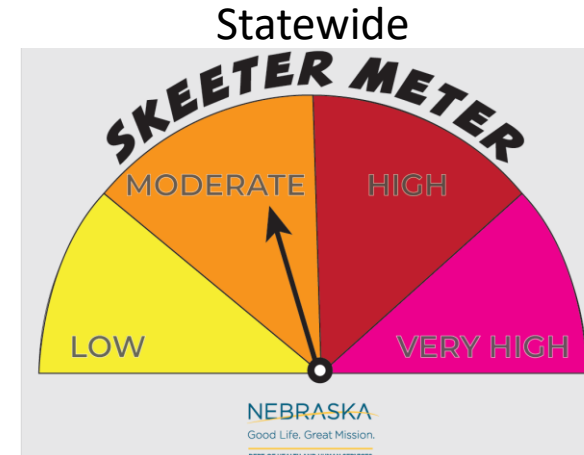
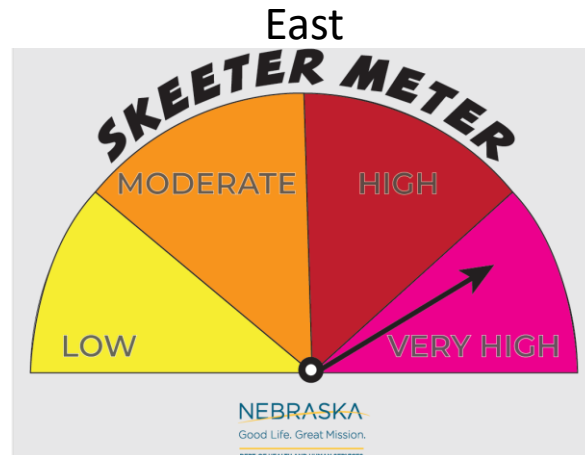
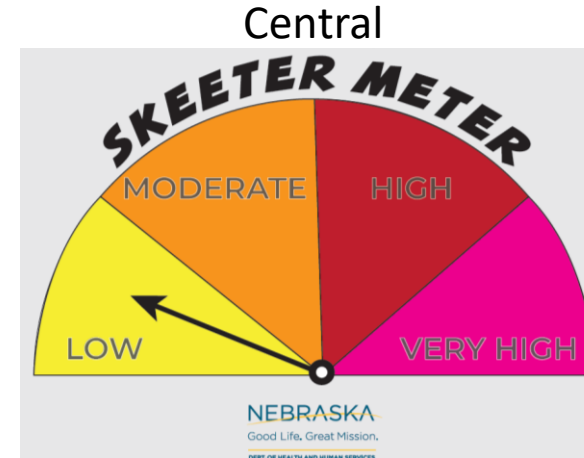
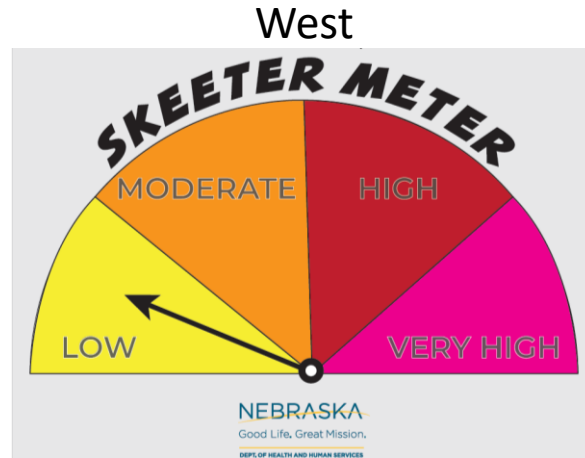
Arbovirus Surveillance Summary

Indicator	Weeks 29 & 30	Season Total
Mosquito traps collected	83	367
<i>Culex</i> mosquitoes collected	1990	4682
Pools tested	143	452
WNV-positive pools	8	14
Counties with WNV-positive pools	6	8
Human WNV cases	*	*
Hospitalized WNV cases	*	*
Neuroinvasive WNV cases	*	*
WNV Associated Deaths	0	0

Key Messages:

- Statewide WNV activity decreased slightly. West and Central Regions continued to report low WNV activity. However, the East Region is seeing very high WNV activity. **Low activity does not mean no risk!**
- Eight positive WNV mosquito pools were detected over the last two weeks from six counties.
- *Culex* mosquito (primary WNV vector) abundance remains low overall in the Central Region but moderate in the East and West Regions.
- Residents should use an EPA registered insect repellent, eliminate standing water around their homes, and wear long sleeves and pants where possible.

Current WNV Risk¹ Level By Region²



1. WNV risk is based on the vector index (VI). It is an entomological metric used to estimate the abundance of WNV infected *Culex* mosquitoes in a specific area or region. It is calculated by multiplying the average *Culex* per trap by the *Culex* IR. The higher the VI the higher the human risk is for acquiring WNV.
2. Regional map can be found on [page 8](#).

Statewide WNV Risk Level Descriptions

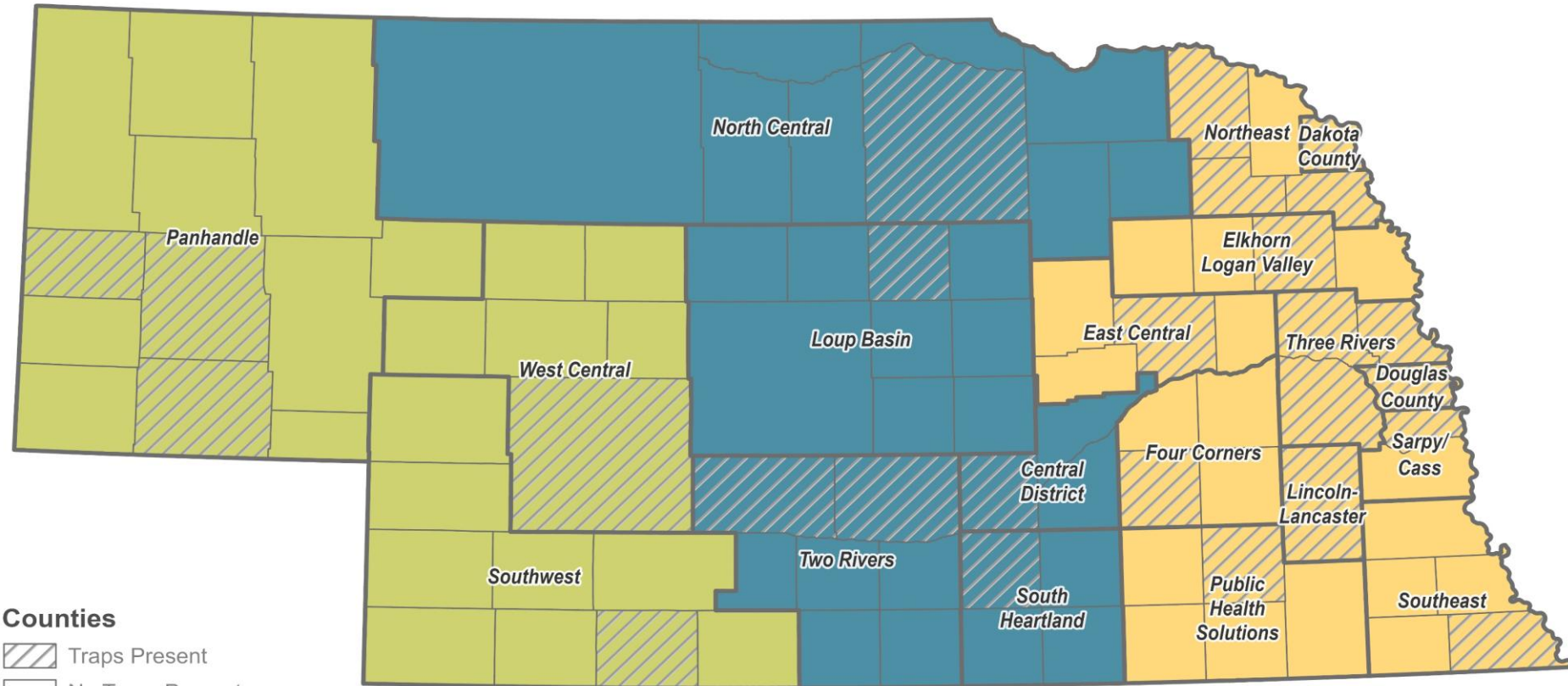
WNV Risk Level	What it Means	What You Can Do
None (Off Season)	1. Infection with WNV is unlikely due to unfavorable mosquito conditions (e.g. late fall, winter, and early spring months).	Prepare for the upcoming mosquito season: 1. Eliminate objects and debris that hold water from your yard. 2. Trim vegetation in your yard. 3. Clean out gutters and repair torn or broken window and door screens.
Low	1. Below average risk of infection with WNV. 2. Low risk <u>DOES NOT</u> equal no risk!	To Prepare: 1. Prepare for the upcoming mosquito season as above if not already done. 2. Be aware of standing water in your yard and fill in low lying areas or treat with mosquito larvicide. To Prevent: 1. Wear mosquito repellent when out between dusk and dawn. 2. Wear long sleeves and long pants when out between dusk and dawn.
Moderate	1. Average risk of infection with WNV. 2. For Nebraska this means infection with WNV is likely or has already occurred.	To Prevent – same as above plus: 1. Wear mosquito repellent. 2. Wear long sleeves and long pants when possible. 3. Dump standing water twice weekly.
High	1. Above average risk of infection with WNV. 2. More people may get infected with WNV in your area.	To Prevent – same as above plus: 1. People over 50 or those who are immunocompromised should adjust outdoor activity to avoid peak mosquito hours (between dusk and dawn) where possible.
Very High	Unusually high risk for infection with WNV exists!	To Prevent – same as above plus: 1. People of all ages should adjust outdoor activity to avoid peak mosquito hours (between dusk and dawn) where possible.



Credit: Credit: CDC, NCEZID-DVBD

2026 NEBRASKA MOSQUITO SURVEILLANCE

2026 Mosquito Surveillance Trapping Regions



Counties

-  Traps Present
-  No Traps Present

Local Health Departments



Mosquito Surveillance Regions

-  Central Mosquito Surveillance Region
-  East Mosquito Surveillance Region
-  West Mosquito Surveillance Region

2026 CDC Light Trap Mosquito Surveillance

West Nile Virus (WNV)

Local Health Departments

West Nile Virus (WNV)

Surveillance Findings

- No Traps Deployed (67)
- No Positive Pools (18)
- Positive WNV Pools (8)

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Table 1. Biweekly¹ WNV Culex IR² and VI³ for Nebraska Regions, 2026

	Region	# of CDC Light Traps Set	Avg Culex per Trap	Positive WNV Pools	WNV Culex IR	WNV VI	WNV VI Risk Level ⁴
Weeks 29 & 30	West	18	48.58	0	0.00	0.00	Low
	Central	22	10.43	2	8.85	86.97	Low
	East	43	15.30	6	9.98	152.89	Very High
	Statewide	83	23.54	8	5.79	99.32	Moderate

1. Number of traps, average Culex, WNV positive pools, WNV infection rate, and WNV vector index are for the most recent two weeks combined. This is due to the sampling schedule being staggered where half of the participating cities/counties trap on an even week and the other half trap on an odd week. Therefore, it takes a full two weeks of trapping to survey all the participating cities/counties across the state.
2. WNV Culex infection rate (IR) is calculated using a bias-corrected maximum likelihood estimate.
3. WNV vector index (VI) is an entomological metric used to estimate the abundance of WNV infected Culex mosquitoes in a specific area or region. It is calculated by multiplying the average Culex per trap by the Culex IR. The higher the VI the higher the human risk is for acquiring WNV.
4. WNV vector index (VI) levels are based on what percentile category the value falls within: 0-40th percentile = low; >40-60th percentile = moderate; >60-80th percentile = high; >80th percentile = very high.

Table 2. Cumulative WNV Culex IR¹ and VI² for Nebraska Regions, 2026

	Region	Total CDC Light Traps Set	Avg Culex per Trap	Total Culex Pools Tested	Total Positive WNV Pools	WNV Culex Infection Rate	WNV Vector Index (VI)
YTD	West	76	18.71	92	0	0.00	0.00
	Central	99	12.37	117	4	3.38	41.83
	East	192	10.60	243	10	5.12	54.27
	Statewide	367	12.76	352	14	3.08	39.27

1. WNV Culex infection rate (IR) is calculated using a bias-corrected maximum likelihood estimate.

2. WNV vector index (VI) is an entomological metric used to estimate the abundance of WNV infected Culex mosquitoes in a specific area or region. It is calculated by multiplying the average Culex per trap by the Culex IR. The higher the VI the higher the human risk is for acquiring WNV.

Figure 1. Statewide *Culex* WNV Vector Index by Collection Week, Nebraska, 2026

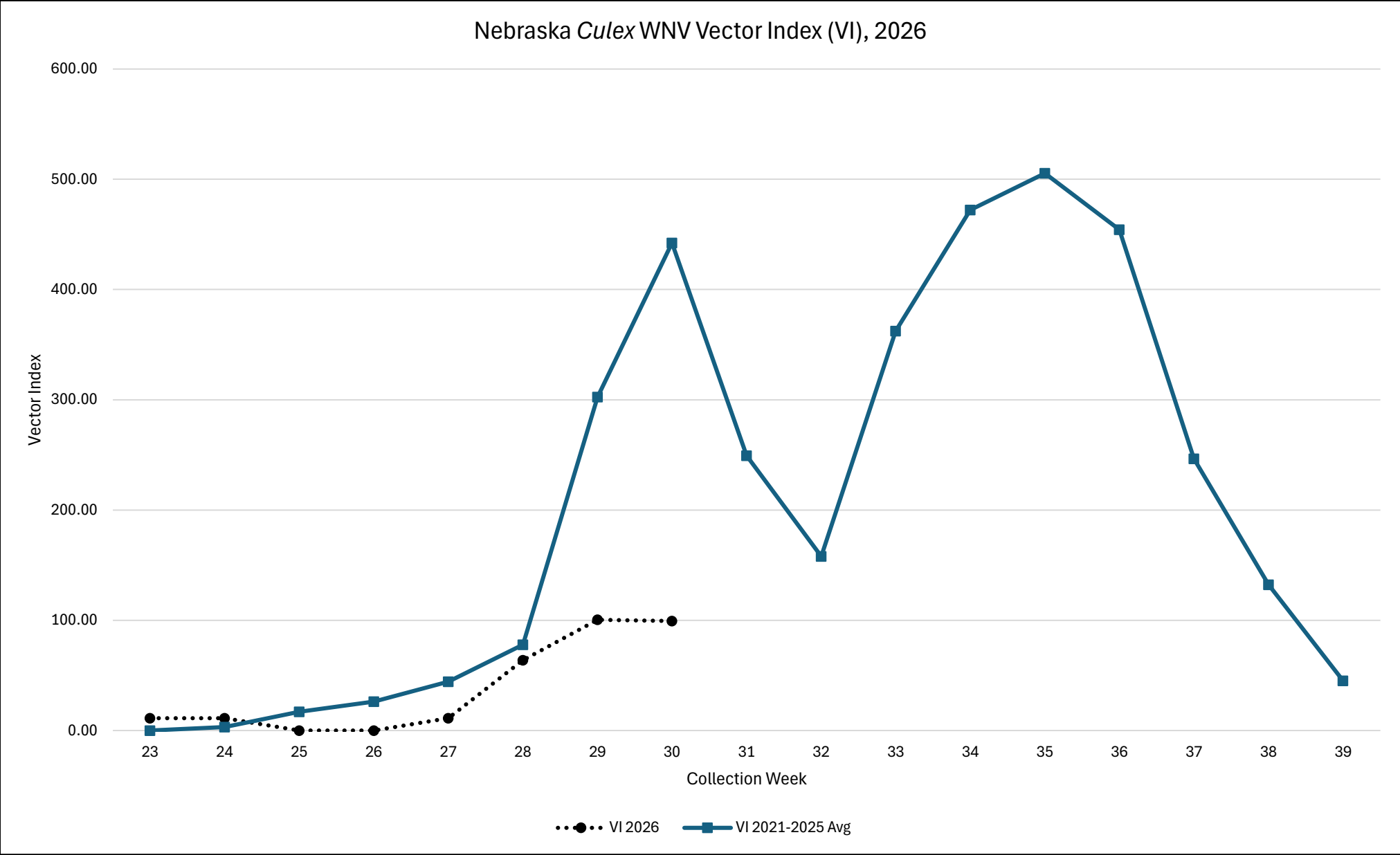


Figure 2. Regional Nebraska *Culex* WNV Vector Index by Collection Week, Nebraska, 2026

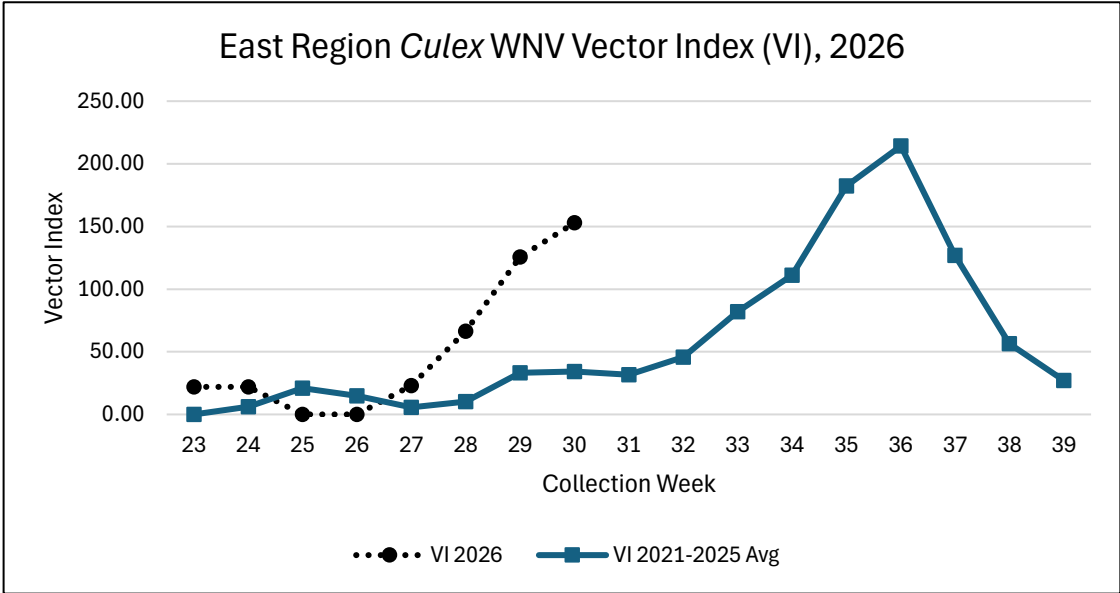
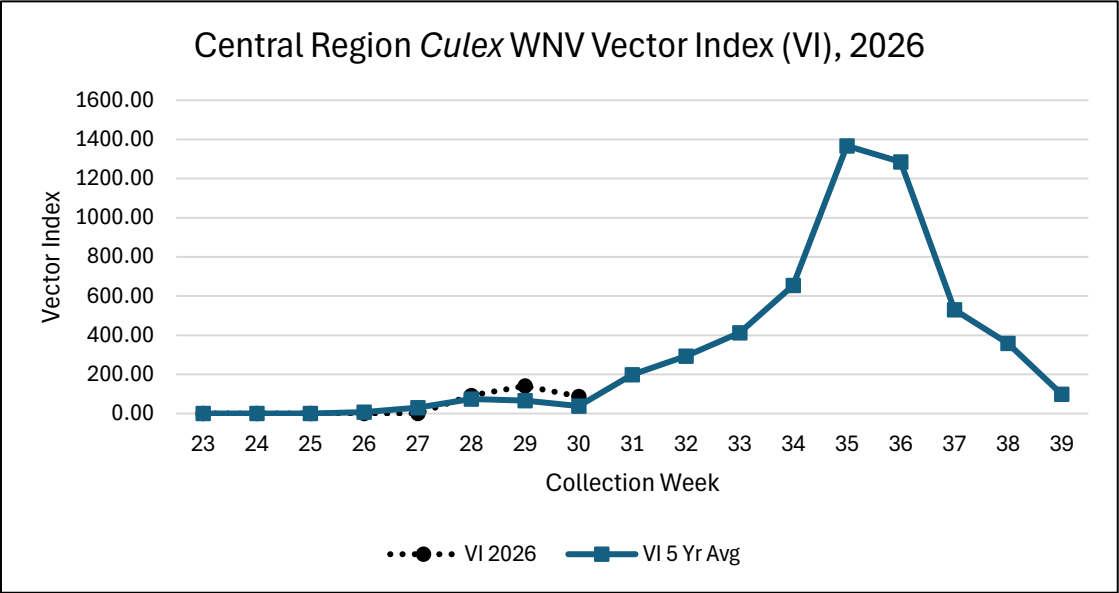
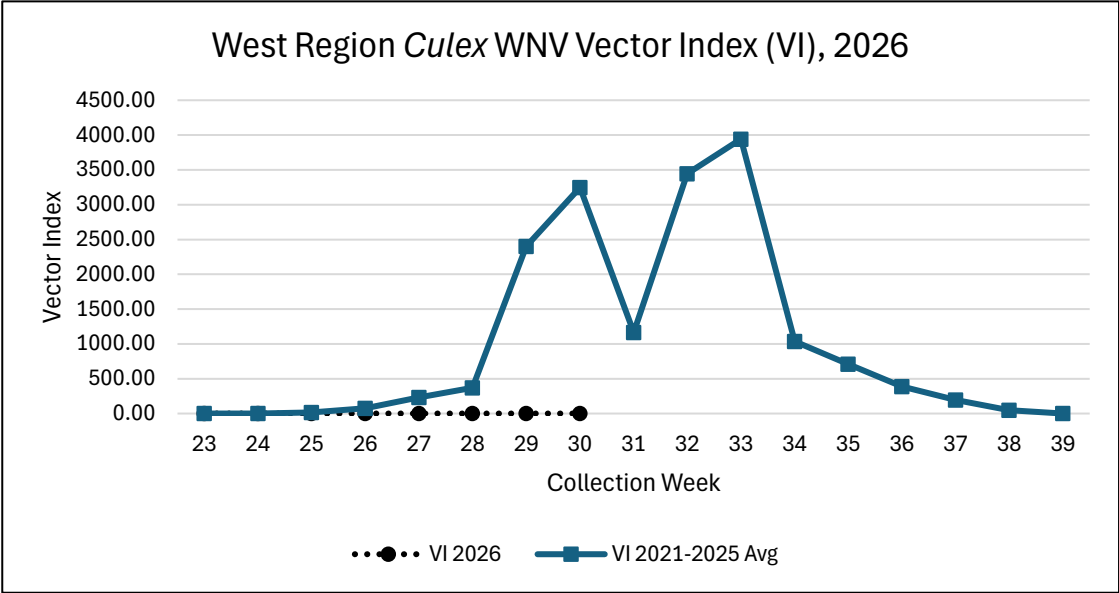


Figure 3. Statewide Average Female *Culex* Per Trap by Collection Week, Nebraska, 2026

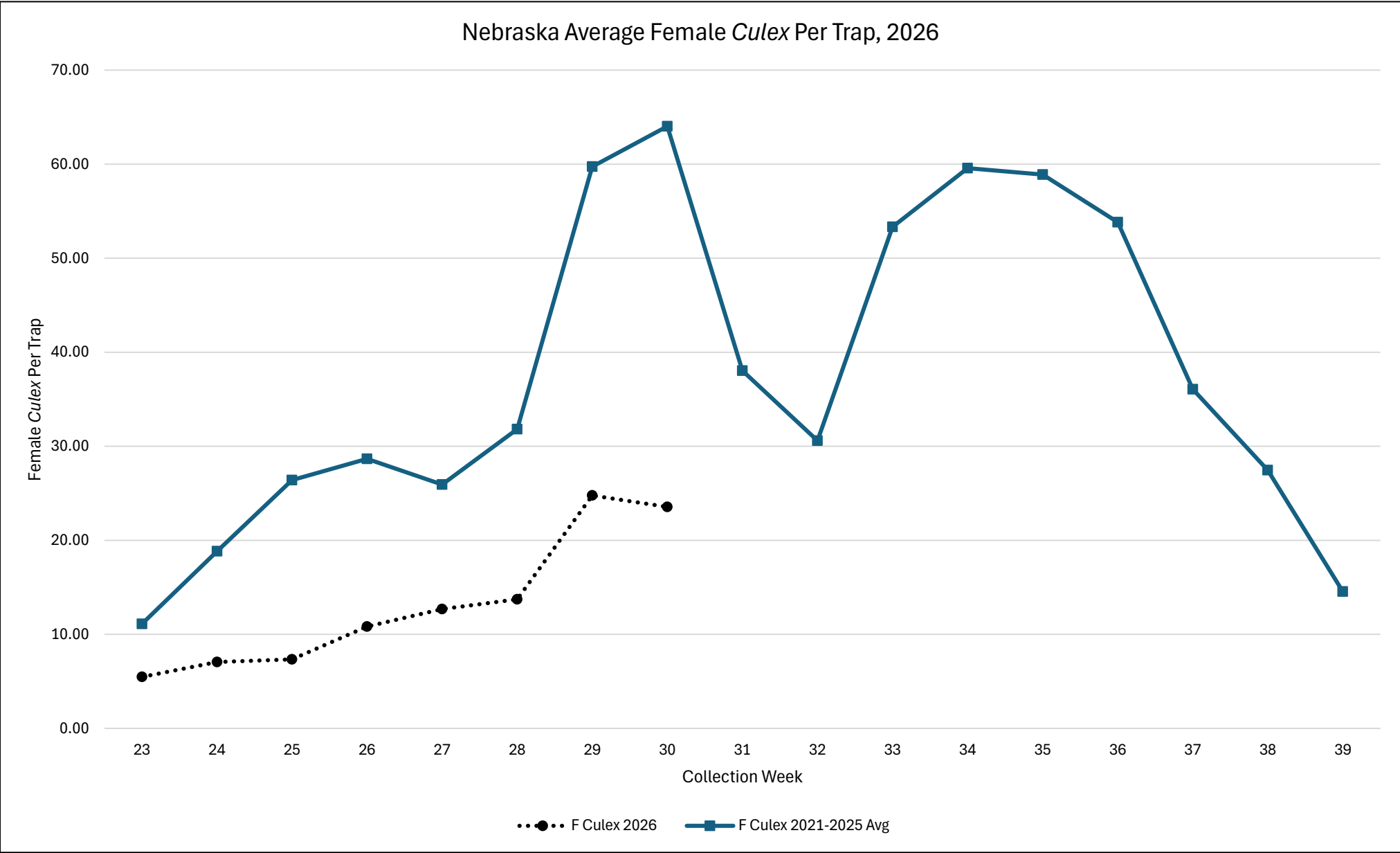


Figure 4. Regional Nebraska Average Female *Culex* Per Trap by Collection Week, Nebraska, 2026

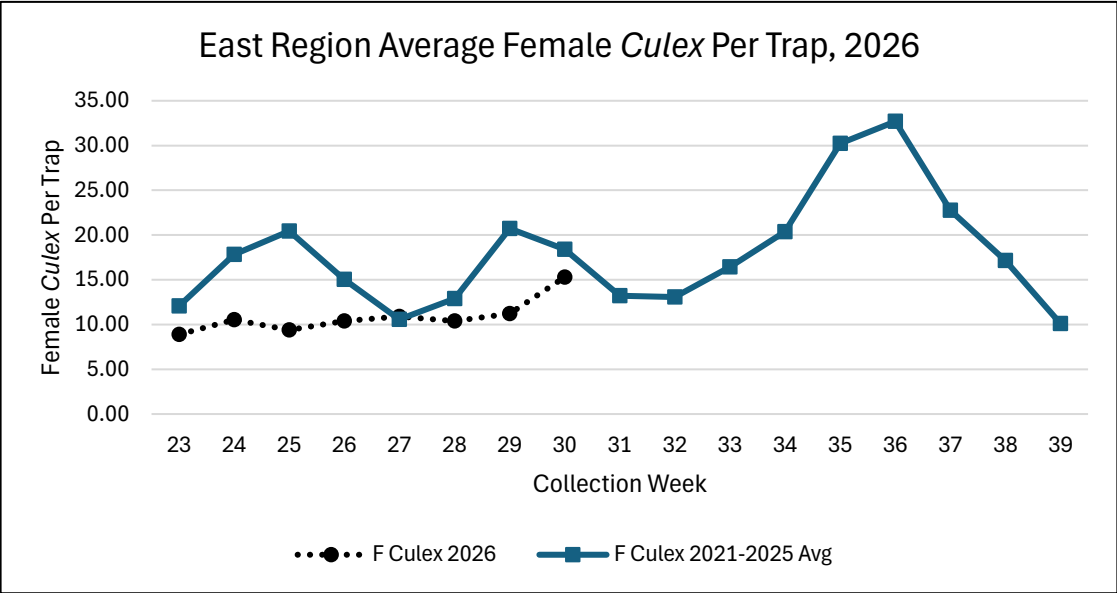
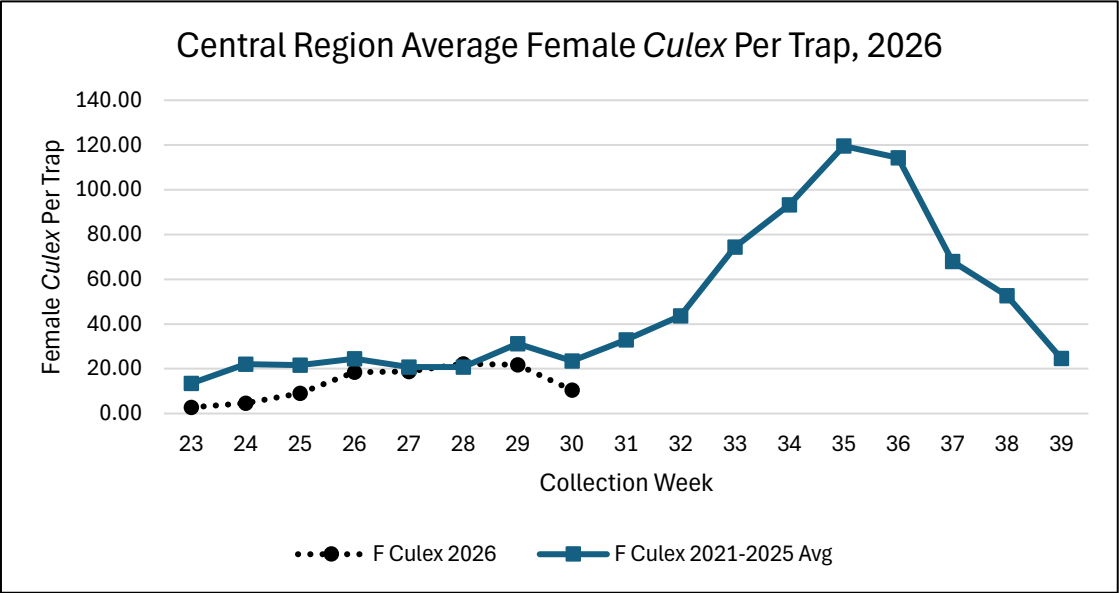
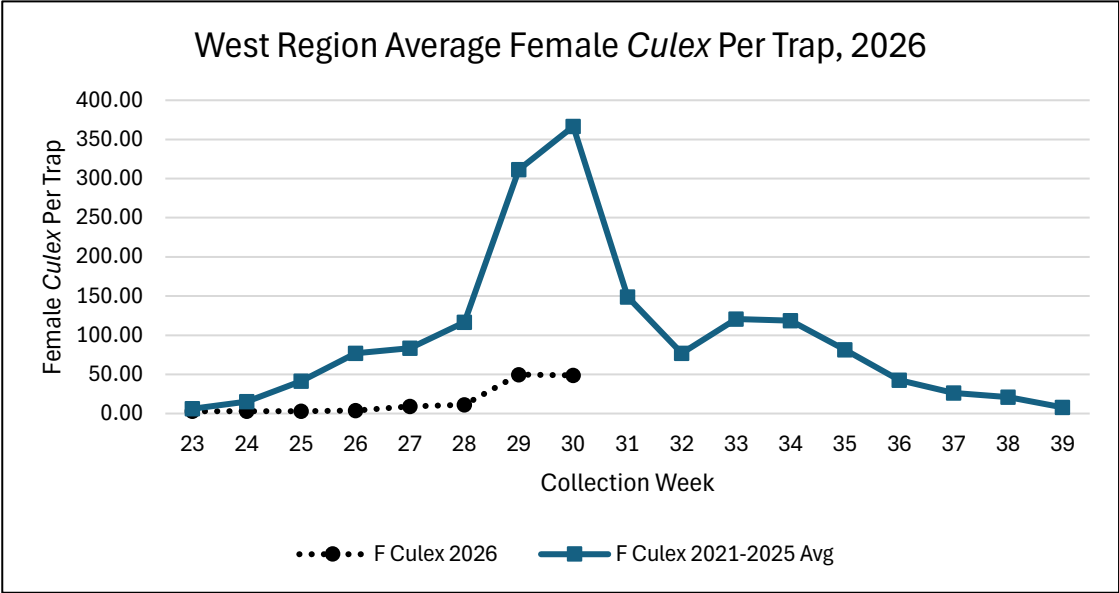


Figure 5. Statewide Cumulative *Culex* Pools Positive for WNV by Collection Week, Nebraska, 2026

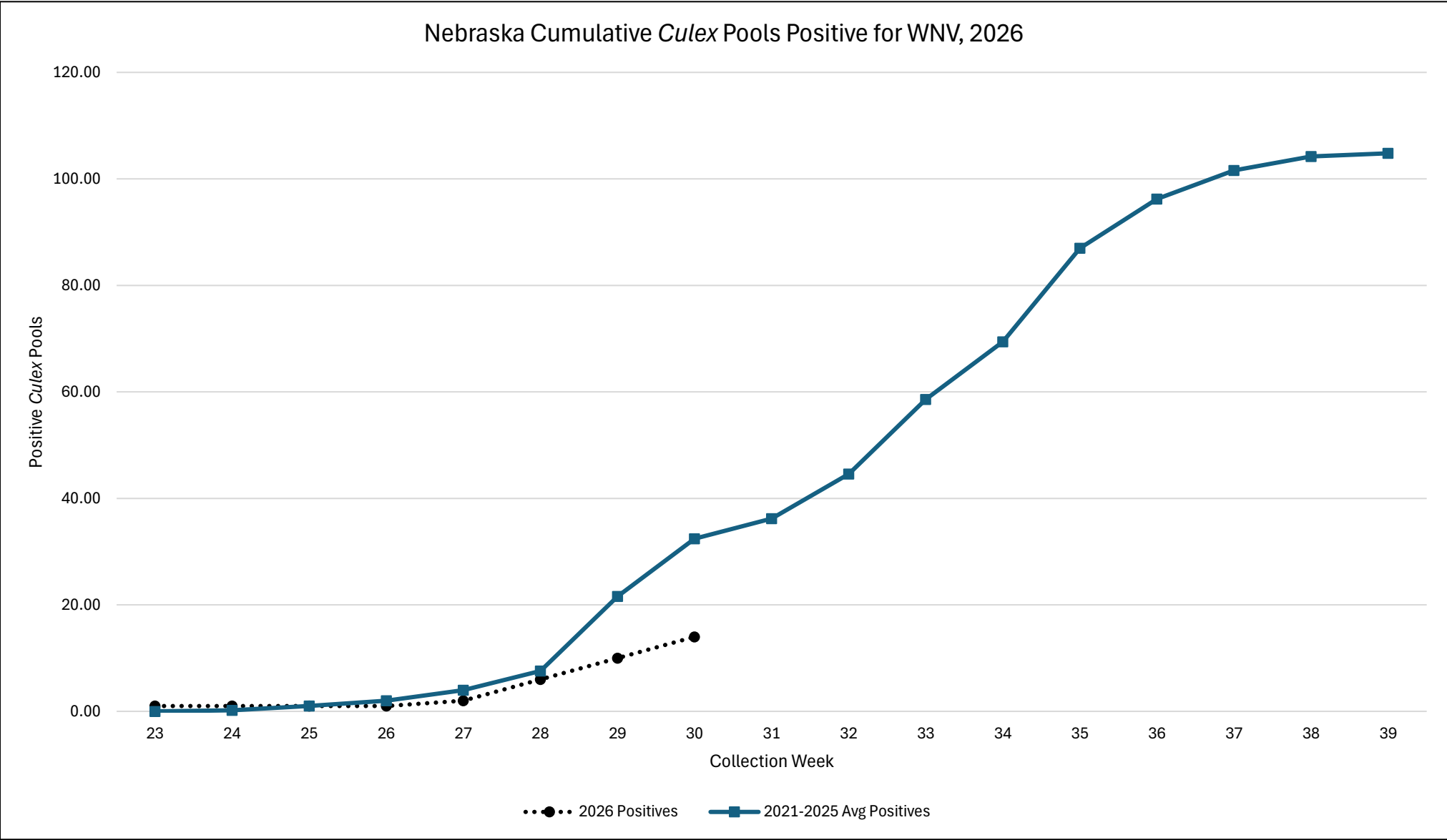


Figure 6. Regional Nebraska Cumulative *Culex* Pools Positive for WNV by Collection Week, Nebraska, 2026

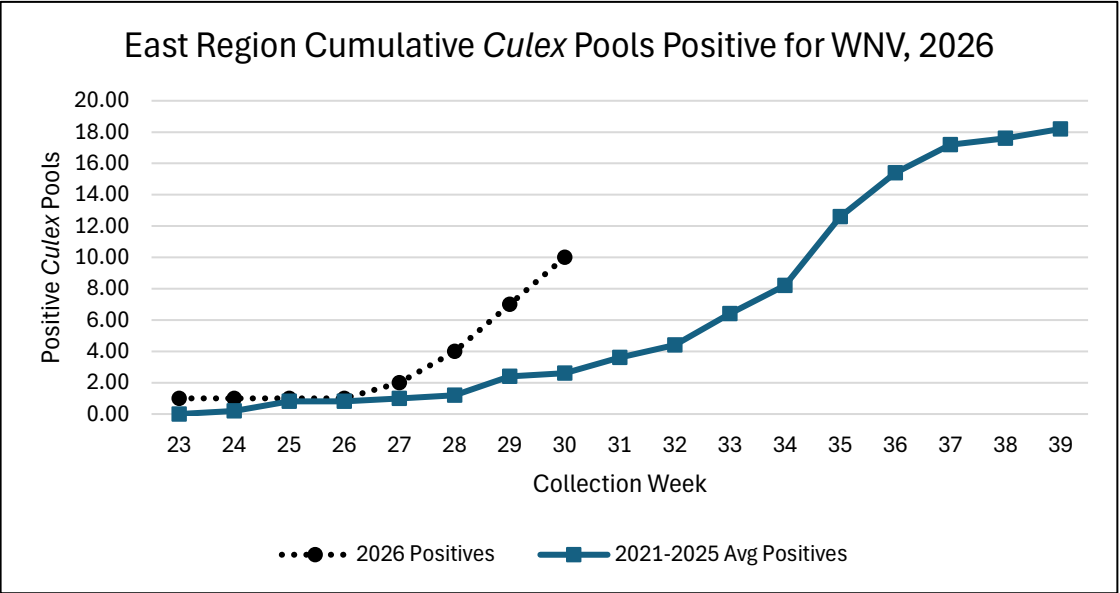
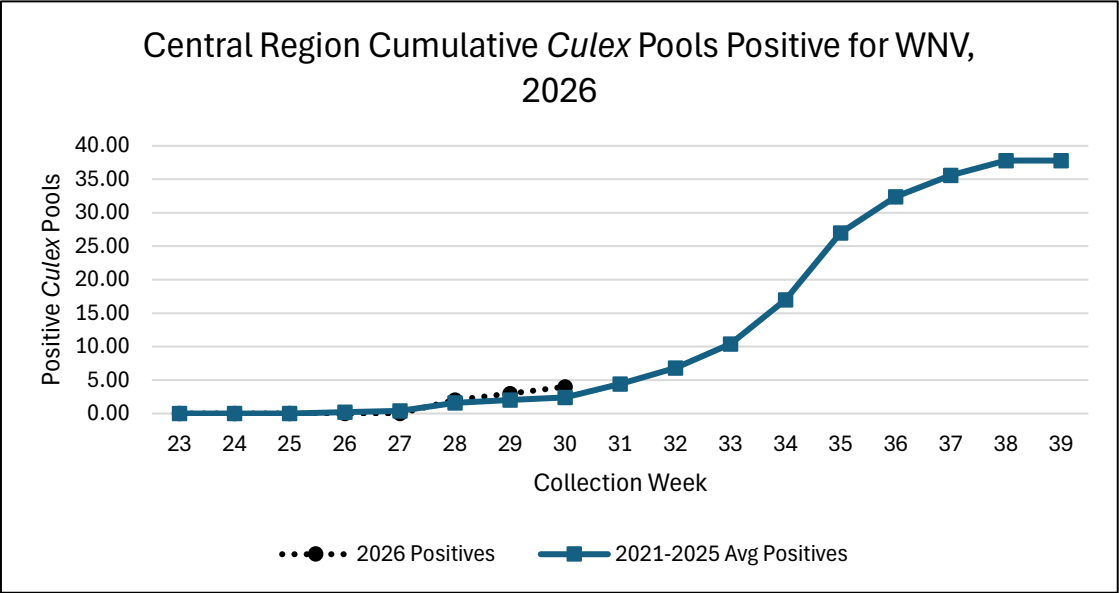
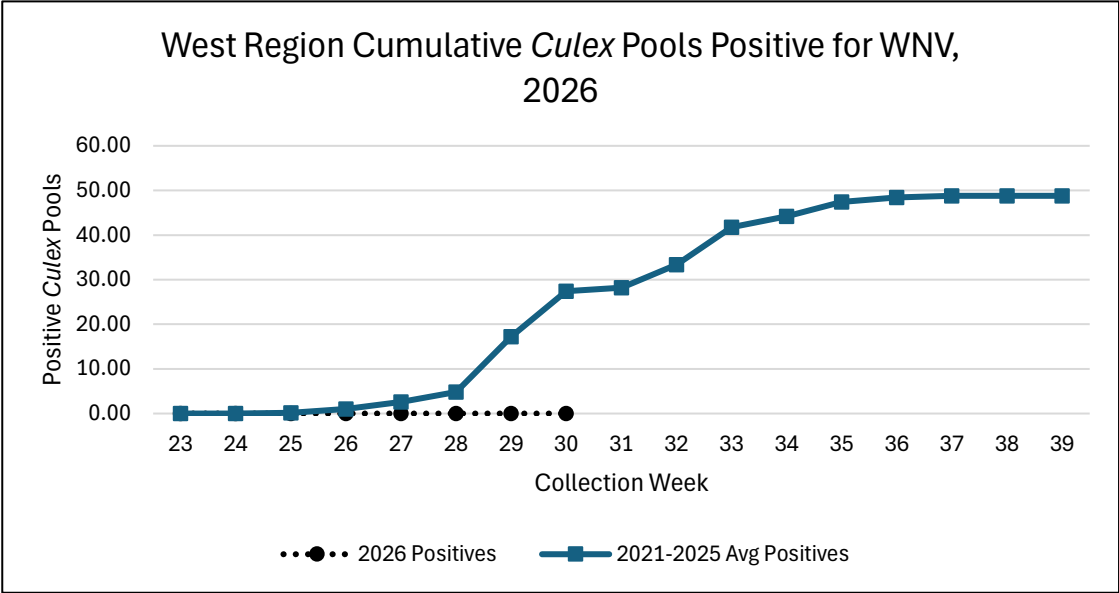


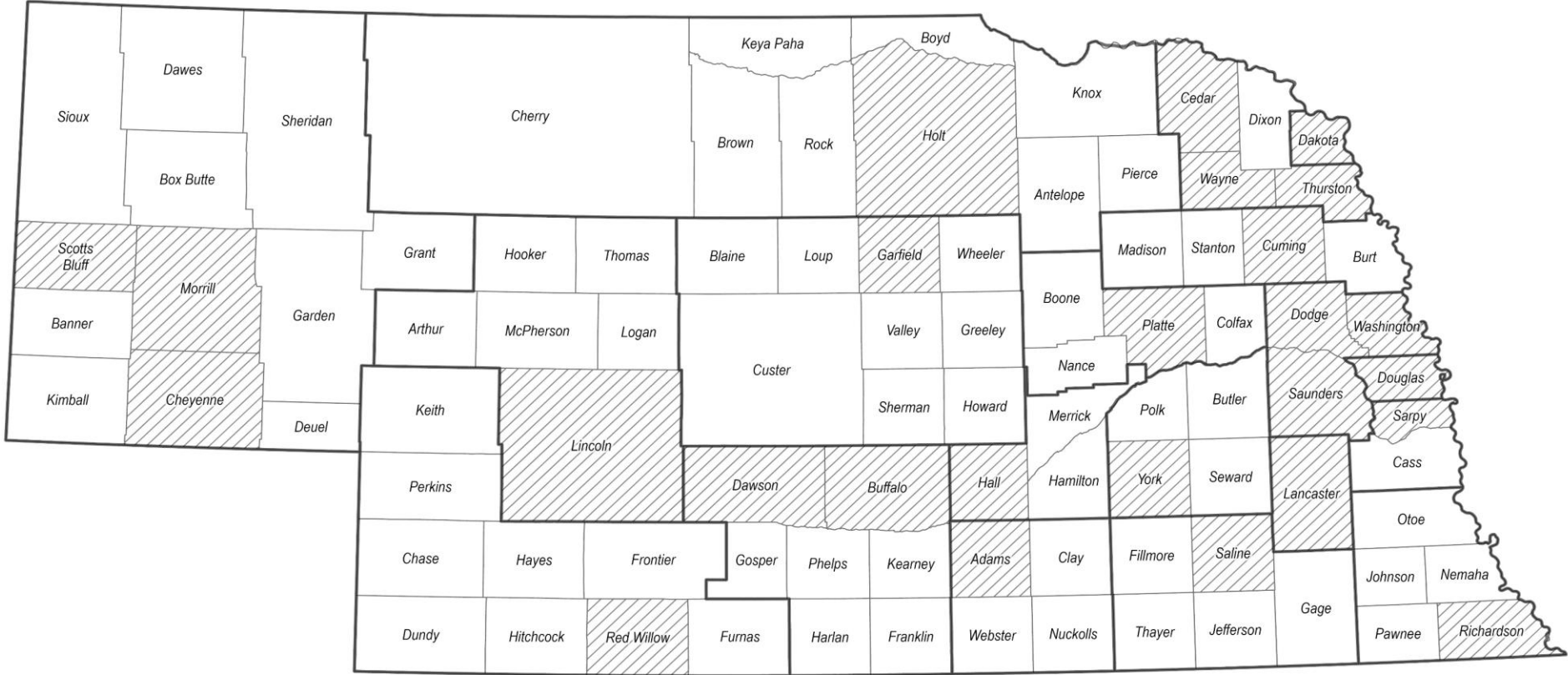
Table 3. Cumulative SLE and WEE Culex IR¹ for Nebraska Regions, 2026

	Region	Total CDC Light Traps Set	Total <i>Culex</i> Pools Tested	Total <i>Culex</i> Tested in Pools	Total Positive SLE Pools	SLE Mosquito Infection Rate	Total Positive WEE Pools	WEE Mosquito Infection Rate
YTD	West	76	92	1422	0	0.00	0	0.00
	Central	99	117	1225	0	0.00	0	0.00
	East	192	243	2035	0	0.00	0	0.00
	Statewide	367	452	4682	0	0.00	0	0.00

1. *Culex* infection rate (IR) is calculated using a bias-corrected maximum likelihood estimate.

2026 CDC Light Trap Mosquito Surveillance

St Louis Encephalitis (SLE)



Local Health Departments



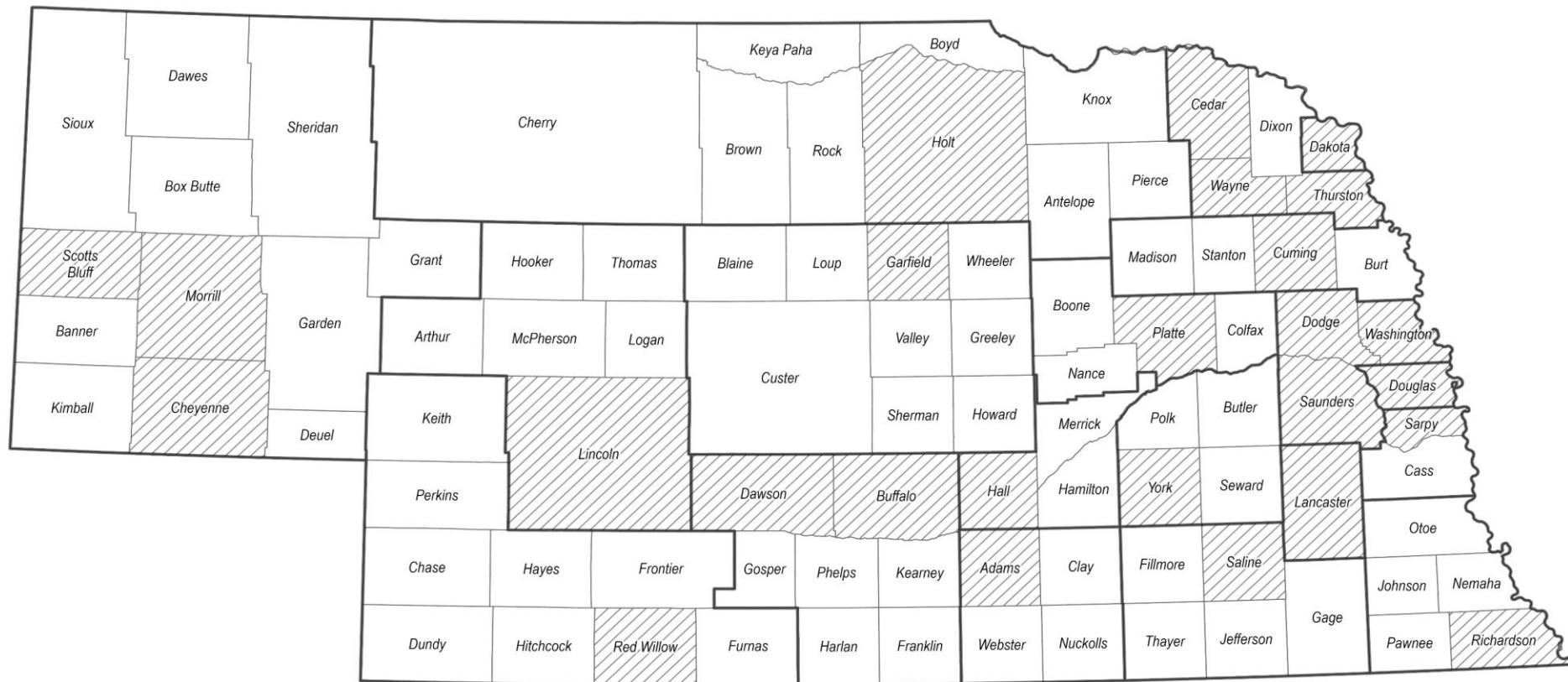
St Louis Encephalitis (SLE)

Surveillance Findings

- No Traps Deployed (67)
- No Positive Pools (26)
- Positive SLE Pools (0)

2026 CDC Light Trap Mosquito Surveillance

Western Equine Encephalitis (WEE)



Local Health Departments



Western Equine Encephalitis (WEE)

Surveillance Findings

☐ No Traps Deployed (67)

 No Positive Pools (26)

 Positive WEE Pools (0)

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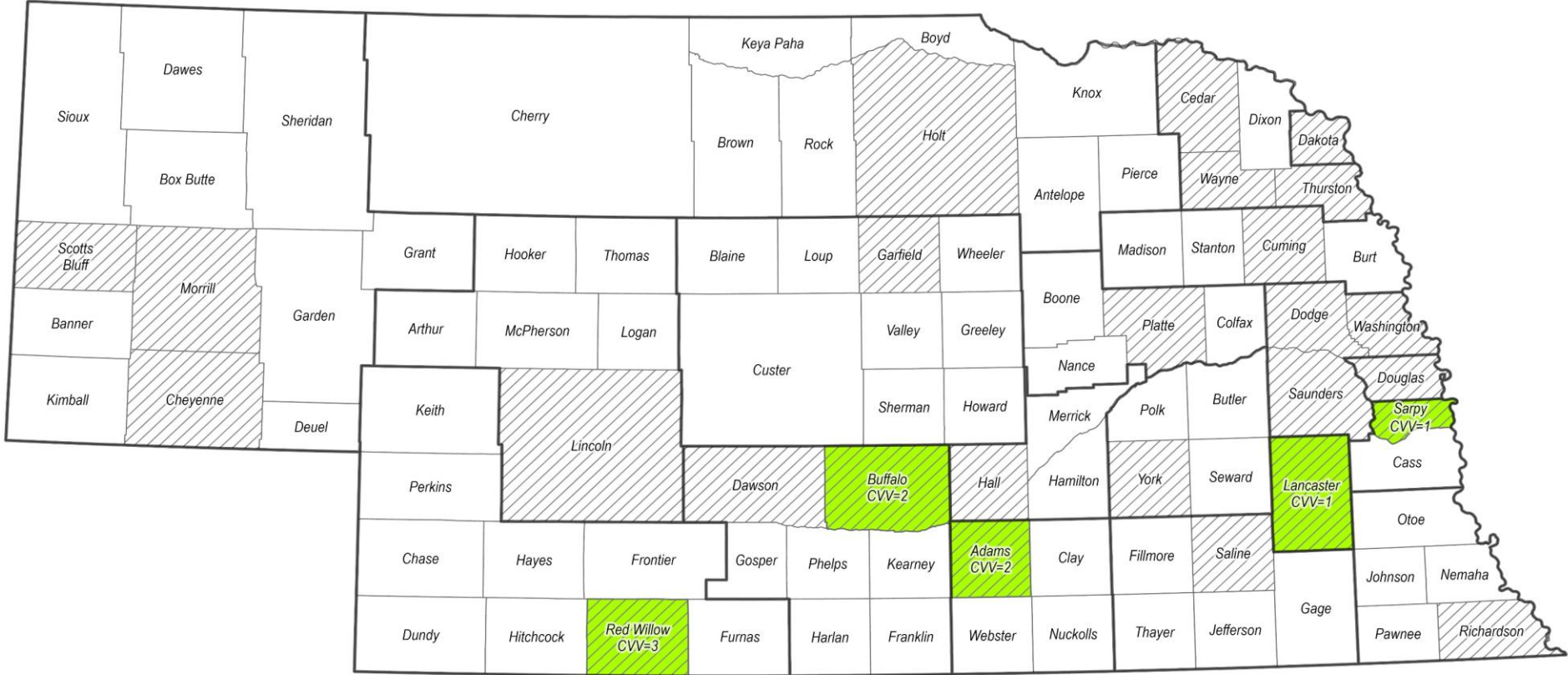
Table 4. Cumulative CVV, JCV and LACV Mosquito IR¹ for Nebraska Regions, 2026

	Region	Total CDC Light Traps Set	Total Mosquito Pools Tested	Total Mosquitoes in Tested Pools	Total Positive CVV Pools	CVV Mosquito Infection Rate	Total Positive JCV Pools	JCV Mosquito Infection Rate	Total Positive LACV Pools	LACV Mosquito Infection Rate
YTD	West	76	68	1976	3	1.51	0	0.00	0	0.00
	Central	99	114	3944	4	1.03	0	0.00	0	0.00
	East	192	337	9345	2	0.21	9	0.97	0	0.00
	Statewide	367	519	15265	9	0.59	9	0.59	0	0.00

1. Mosquito infection rate (IR) is calculated using a bias-corrected maximum likelihood estimate.

2026 CDC Light Trap Mosquito Surveillance

Cache Valley Virus (CVV)



Local Health Departments



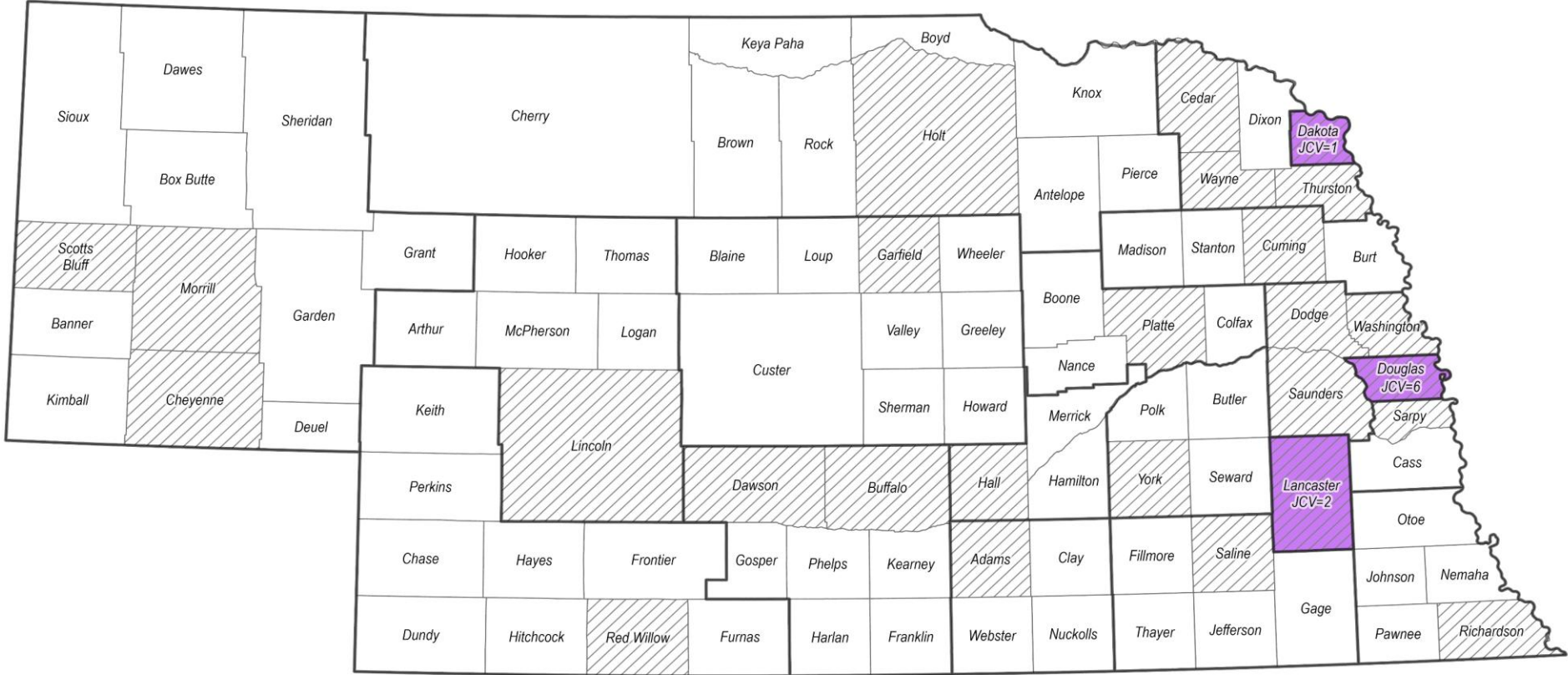
Cache Valley Virus (CVV)

Surveillance Findings

- No Traps Deployed (67)
- No Positive Pools (21)
- Positive CVV Pools (5)

2026 CDC Light Trap Mosquito Surveillance

Jamestown Canyon Virus (JCV)



Local Health Departments



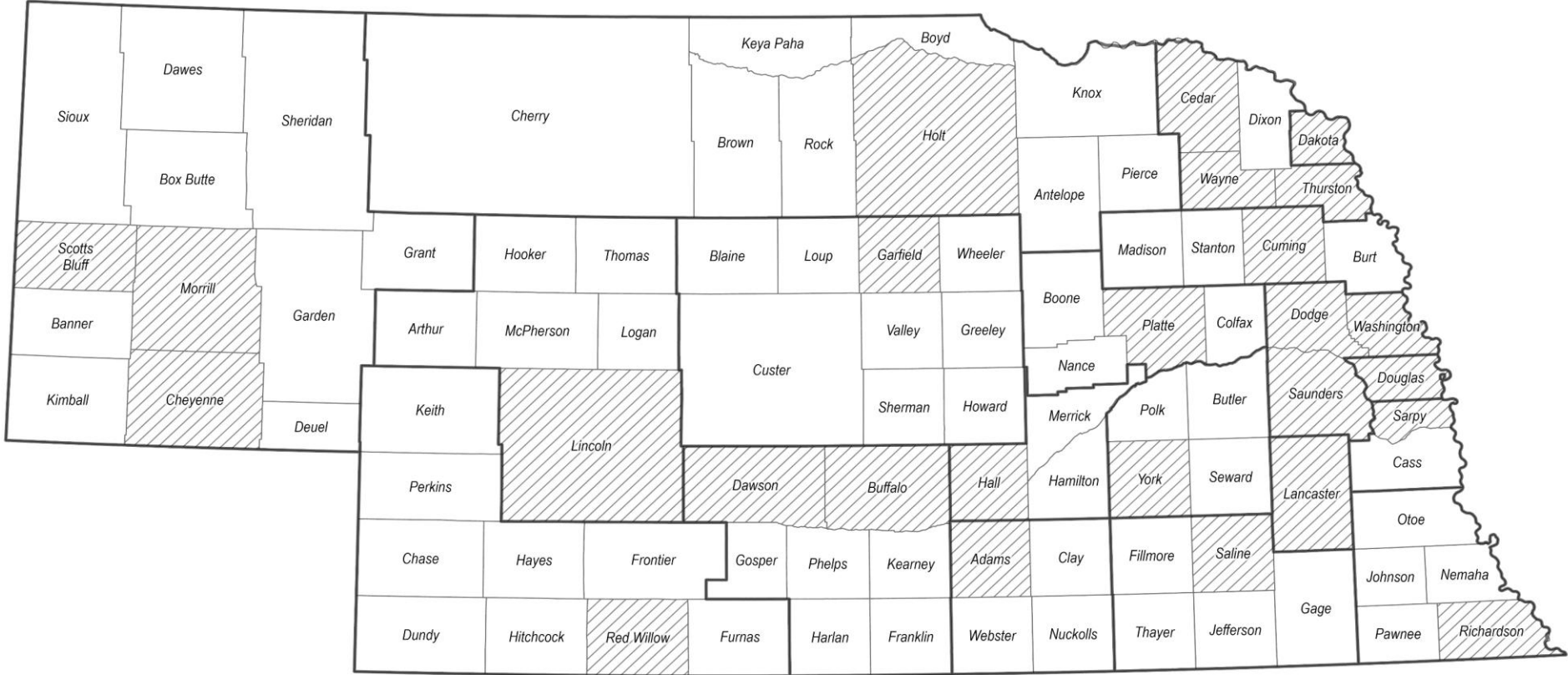
Jamestown Canyon Virus (JCV)

Surveillance Findings

- No Traps Deployed (67)
- No Positive Pools (23)
- Positive JCV Pools (3)

2026 CDC Light Trap Mosquito Surveillance

La Crosse Encephalitis Virus (LACV)



Local Health Departments



La Crosse Encephalitis Virus (LACV)

Surveillance Findings

- No Traps Deployed (67)
- No Positive Pools (26)
- Positive LACV Pools (0)



2026 NEBRASKA MOSQUITO- BORNE DISEASE SURVEILLANCE

Table 5. Cumulative Human Mosquito-Borne Disease Cases, Nebraska, 2026

Condition	2026	2025
Chikungunya**	*	*
Dengue**	*	*
Jamestown Canyon	0	*
Malaria**	*	15
West Nile Disease Cases	*	54
West Nile Blood Donors	*	10
Zika**	*	0

*Data suppressed due to low numbers (1 – 5 cases).

** Reported cases have all been acquired during overseas travel to endemic areas.

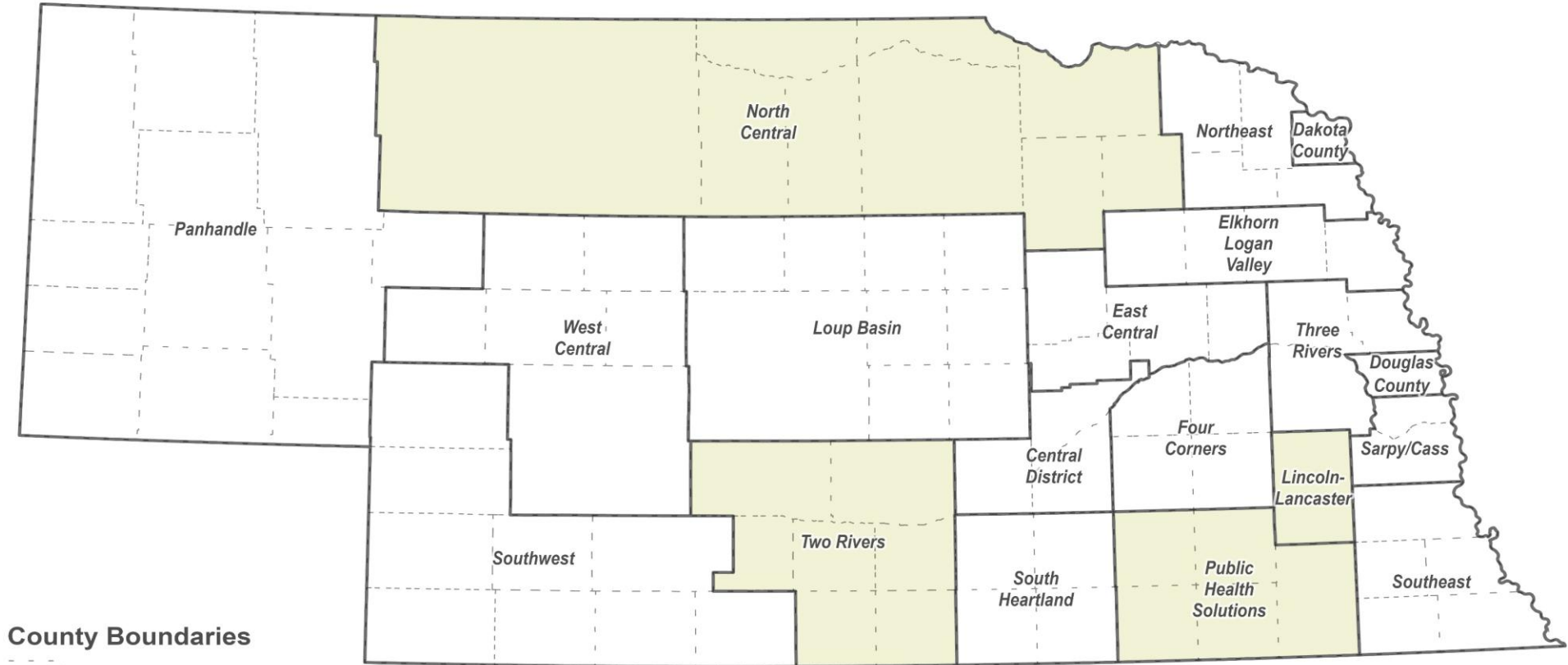
Table 6. Human WNV Disease Clinical Specifics, Nebraska, 2026

Age Range	#
0-13	0
14-25	*
26-50	*
51-64	*
65+	0
Sex	#
Male	*
Female	*
Diagnosis	#
WNV Neuroinvasive	*
WNV Non-Neuroinvasive	*
Hospitalized	*
Deaths	0

*Data suppressed due to low numbers (1 – 5 cases).

2026 West Nile Virus Human Clinical Cases

by Local Health Department



County Boundaries

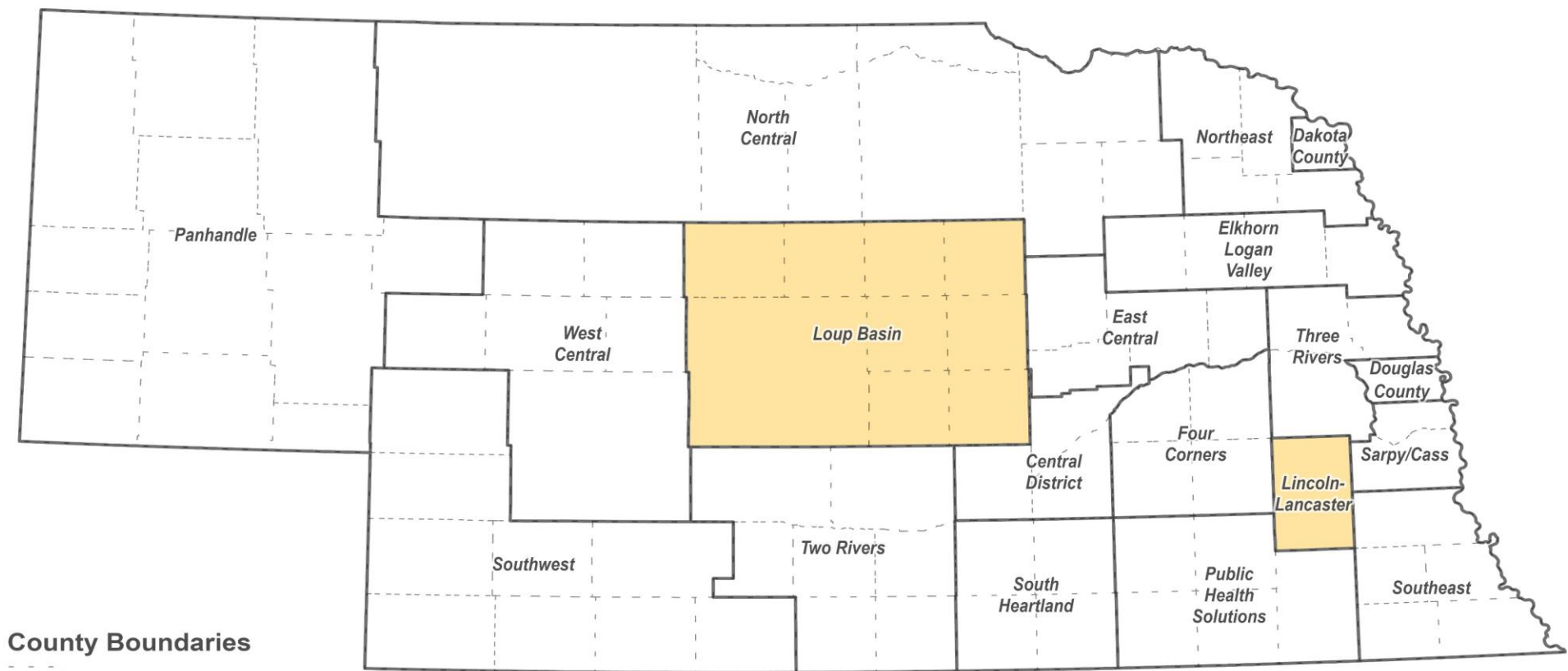
Local Health Departments

of Human WNV Clinical Cases

- 0 (15 LHD)
- 1 to 5 (4 LHD)
- 6 to 10 (0 LHD)
- More than 10 (0 LHD)

2026 West Nile Virus Blood Donation Cases

by Local Health Department





RESOURCES

Photos courtesy of Nebraska Vector-Borne
Disease Program

Collection Week Calendar

2026 EPI WEEK CALENDAR

Months shown in **RED** (center column) are potential "Vector" months

JANUARY							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
53 (2025)					1	2	3
1	4	5	6	7	8	9	10
2	11	12	13	14	15	16	17
3	18	19	20	21	22	23	24
4	25	26	27	28	29	30	31

FEBRUARY							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
5	1	2	3	4	5	6	7
6	8	9	10	11	12	13	14
7	15	16	17	18	19	20	21
8	22	23	24	25	26	27	28

MARCH							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
9	1	2	3	4	5	6	7
10	8	9	10	11	12	13	14
11	15	16	17	18	19	20	21
12	22	23	24	25	26	27	28
13	29	30	31				

APRIL							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
13				1	2	3	4
14	5	6	7	8	9	10	11
15	12	13	14	15	16	17	18
16	19	20	21	22	23	24	25
17	26	27	28	29	30		

MAY							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
17						1	2
18	3	4	5	6	7	8	9
19	10	11	12	13	14	15	16
20	17	18	19	20	21	22	23
21	24	25	26	27	28	29	30
22	31						

JUNE							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
22		1	2	3	4	5	6
23	7	8	9	10	11	12	13
24	14	15	16	17	18	19	20
25	21	22	23	24	25	26	27
26	28	29	30				

JULY							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
26				1	2	3	4
27	5	6	7	8	9	10	11
28	12	13	14	15	16	17	18
29	19	20	21	22	23	24	25
30	26	27	28	29	30	31	

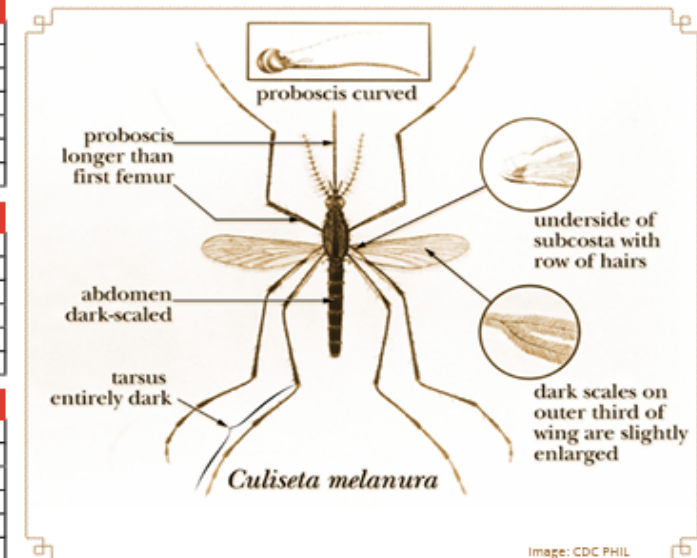
AUGUST							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
30							1
31	2	3	4	5	6	7	8
32	9	10	11	12	13	14	15
33	16	17	18	19	20	21	22
34	23	24	25	26	27	28	29
35	30	31					

SEPTEMBER							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
35			1	2	3	4	5
36	6	7	8	9	10	11	12
37	13	14	15	16	17	18	19
38	20	21	22	23	24	25	26
39	27	28	29	30			

OCTOBER							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
39					1	2	3
40	4	5	6	7	8	9	10
41	11	12	13	14	15	16	17
42	18	19	20	21	22	23	24
43	25	26	27	28	29	30	31

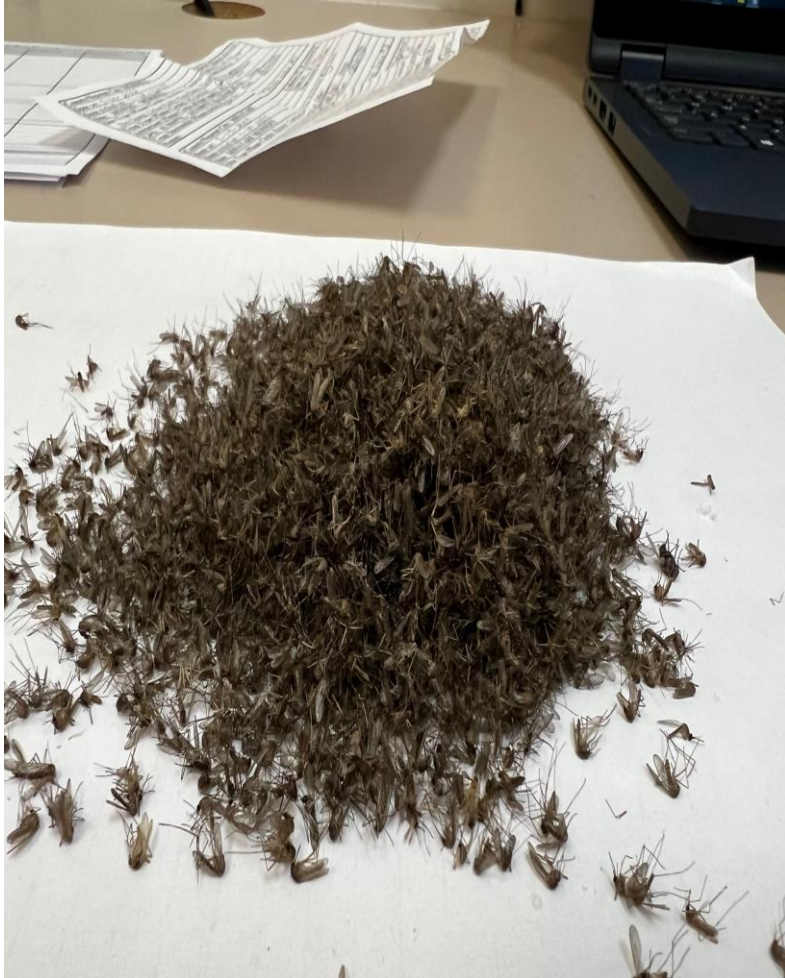
NOVEMBER							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
44	1	2	3	4	5	6	7
45	8	9	10	11	12	13	14
46	15	16	17	18	19	20	21
47	22	23	24	25	26	27	28
48	29	30					

DECEMBER							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
48			1	2	3	4	5
49	6	7	8	9	10	11	12
50	13	14	15	16	17	18	19
51	20	21	22	23	24	25	26
52	27	28	29	30	31		



Credit: Central Massachusetts Mosquito Control Project, <https://www.cmmcp.org/>

Resources



- [CDC Prevent Mosquito Bites Page](#)
- [CDC West Nile Virus Page](#)
- [CDC Cache Valley Virus](#)
- [CDC Jamestown Canyon Virus](#)
- [Nebraska Department of Agriculture WNV Page](#)
- [Nebraska Department of Health and Human Services Vector-Borne Disease Page](#)
- [Nebraska Department of Health and Human Services Interactive Mosquito Surveillance Map](#)
- [Nebraska Mosquito and Vector Control Association](#)
- [U.S. EPA Insect Repellent Page](#)