



# 2025 NEBRASKA TICKBORNE DISEASE REPORT

NEBRASKA DEPARTMENT OF HEALTH AND  
HUMAN SERVICES (NDHHS)

VECTOR-BORNE DISEASE PROGRAM

MMWR WEEK 34  
(Week Ending 8/23/2025)

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



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# Summary

- Tickborne Disease Cases
  - 69 tickborne disease cases have been reported in 2025
  - 21 cases have been hospitalized
  - 0 deaths due to tickborne diseases have been reported
- Tick Bite Tracker
  - Visit rates for tick bites dipped just below the historical average for the first time in 10 weeks
- Active Tick Surveillance
  - 2,665 total ticks have been collected in 2025
  - 34 sites have been sampled to date
  - 4 species identified





# NEBRASKA HUMAN TICKBORNE DISEASE SURVEILLANCE

Credit: CDC, NCEZID-DVBD

# Human Tickborne Disease Surveillance

Nebraska Tickborne Disease Cases, 2025 & 2024		
Condition	2025	2024
Alpha-Gal Syndrome	21	n/a
Anaplasmosis	0	0
Babesiosis	0	0
Ehrlichiosis	16	17
Lyme Disease	*	6
Spotted Fever Group Rickettsioses	*	8
Tularemia	19	27

- Statewide number of tickborne disease cases reported to the Nebraska Department of Health and Human Services (NDHHS)
  - All data is preliminary and subject to change as more information is gathered.
  - Reported cases only include lab confirmed and probable cases meeting [CSTE/CDC case definition](#).
  - Spotted fever group rickettsioses includes Rocky Mountain Spotted Fever (RMSF).

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

# Alpha-gal Syndrome



Credit: CDC PHIL



- Alpha-gal syndrome (AGS) is a serious, potentially life-threatening allergic condition that can occur after the bite of a lone star tick.
- Symptoms generally occur 2-6 hours after people eat red meat or are exposed to other products made from mammals.
- Alpha-gal syndrome is now reportable in Nebraska. Cases are being monitored as of January 2025.
- AGS is diagnosed by allergist or healthcare provider through:
  - Detailed patient history
  - Physical exam
  - Blood test looking for antibodies to alpha-gal

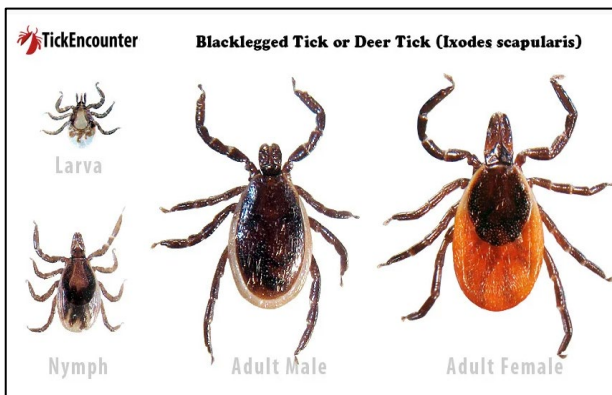
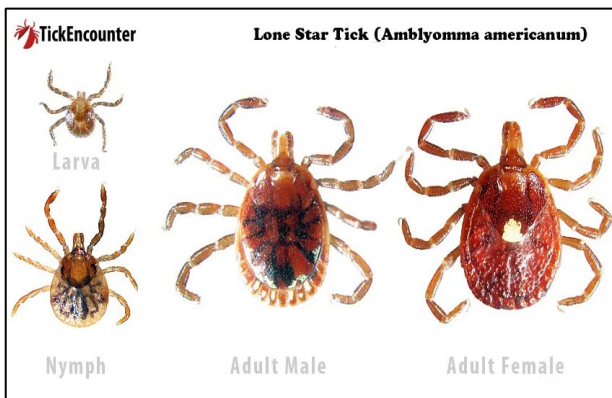
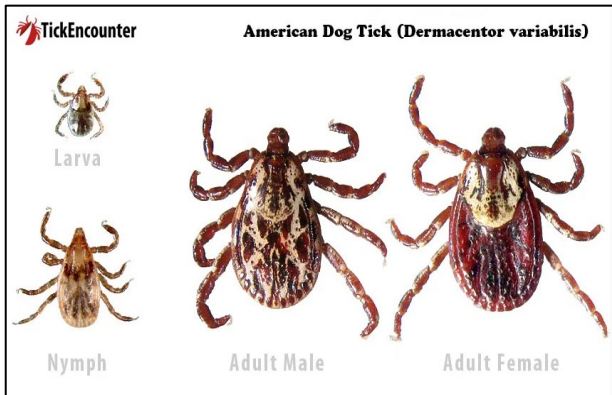
Learn more: <https://dhhs.ne.gov/Pages/Alpha-gal-Syndrome.aspx>



# NEBRASKA TICK BITE DATA TRACKER

Credit: NDHHS Vector-Borne Disease Program,  
Top Row- male (left) and female (right) Gulf Coast  
ticks (*Amblyomma maculatum*), Bottom Row –  
male (left) and female (right) American dog ticks  
(*Dermacentor variabilis*)

# Tick Bite Data Tracker

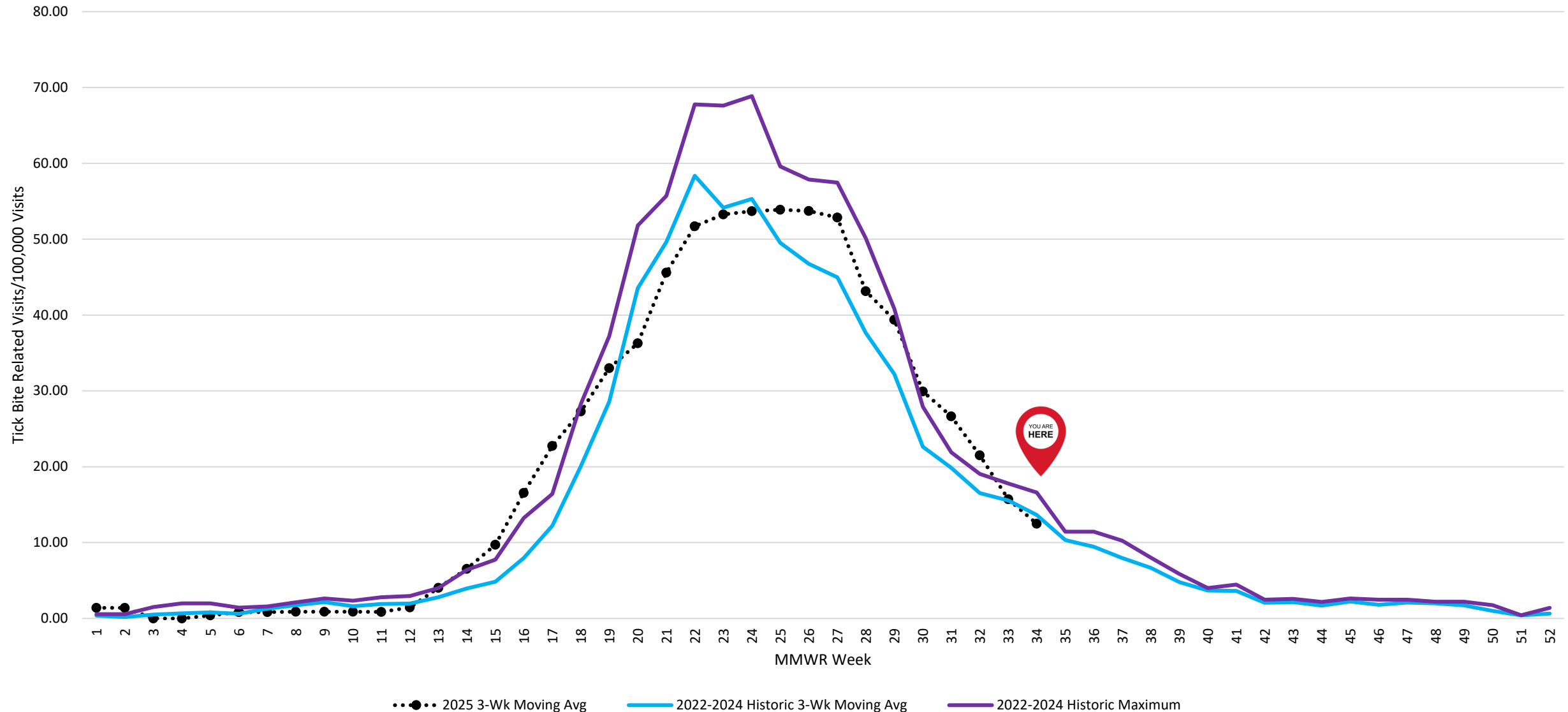


- NDHHS utilizes syndromic surveillance data (ESSENCE) as an indicator for tick activity and tick bite risk.
  - Data comes from emergency departments and outpatient clinic visits.
  - Visits related to tick bites are detected via a query containing various spellings of the word “tick” or combination of “tick” and “bite”.
  - Not all emergency departments and outpatient clinics report data to the NDHHS ESSENCE system and therefore results might not be generalizable to facilities not contributing data.
- The statewide 3-week average tick bite visit rate during MMWR week 34 was slightly below both the historic average and the historic maximum for this time of year.
- The 2025 MMWR week 34 tick bite visit rate was slightly higher (15.54 tick bite visits/100,000) compared to 2024 (12.49 tick bite visits/100,000)

Images: Tick Encounter,  
<https://web.uri.edu/tickencounter/>

# Tick Bite Data Tracker

Emergency Department (ED) & Outpatient Clinic Visits for Tick Bites by Week, Nebraska 2025





# NEBRASKA ACTIVE TICK SURVEILLANCE PROGRAM

Credit: NDHHS Vector-Borne Disease Program, active tick surveillance using tick flagging method

# Active Tick Surveillance



- NDHHS is partnering with 10 of the 19 local health departments and conduct active tick surveillance across the state in 2025
- NDHHS will conduct active tick surveillance at sites in the other local health jurisdictions
- Goals of active surveillance:
  - Classify county status of different tick species in Nebraska
  - Determine presence and prevalence of tickborne pathogens at the county level
  - Data used to provide evidence-based information to stakeholders on where and when people are at risk for exposure to ticks and tickborne pathogens
  - Help explain epidemiological trends of tickborne diseases

Credit: NDHHS Vector-Borne Disease Program, collecting ticks off the tick flag

# Active Tick Surveillance Results



- 22 counties surveyed
  - 34 total sites, 44 site visits
- 72,662 m<sup>2</sup> surveyed
- 2,665 total ticks collected
  - Collection Methods: Tick Flagging
- 4 species have been identified during 2025 surveys:
  - Lone star tick (*Amblyomma americanum*)\*
  - American dog tick (*Dermacentor variabilis*)\*
  - Blacklegged or deer tick (*Ixodes scapularis*)\*
  - “Other” rabbit tick (*Ixodes dentatus*)

\*Medically important ticks that can transmit pathogens to people

Credit: NDHHS Vector-Borne Disease Program, female American dog tick collected off tick drag

# 2025 Collected Ticks

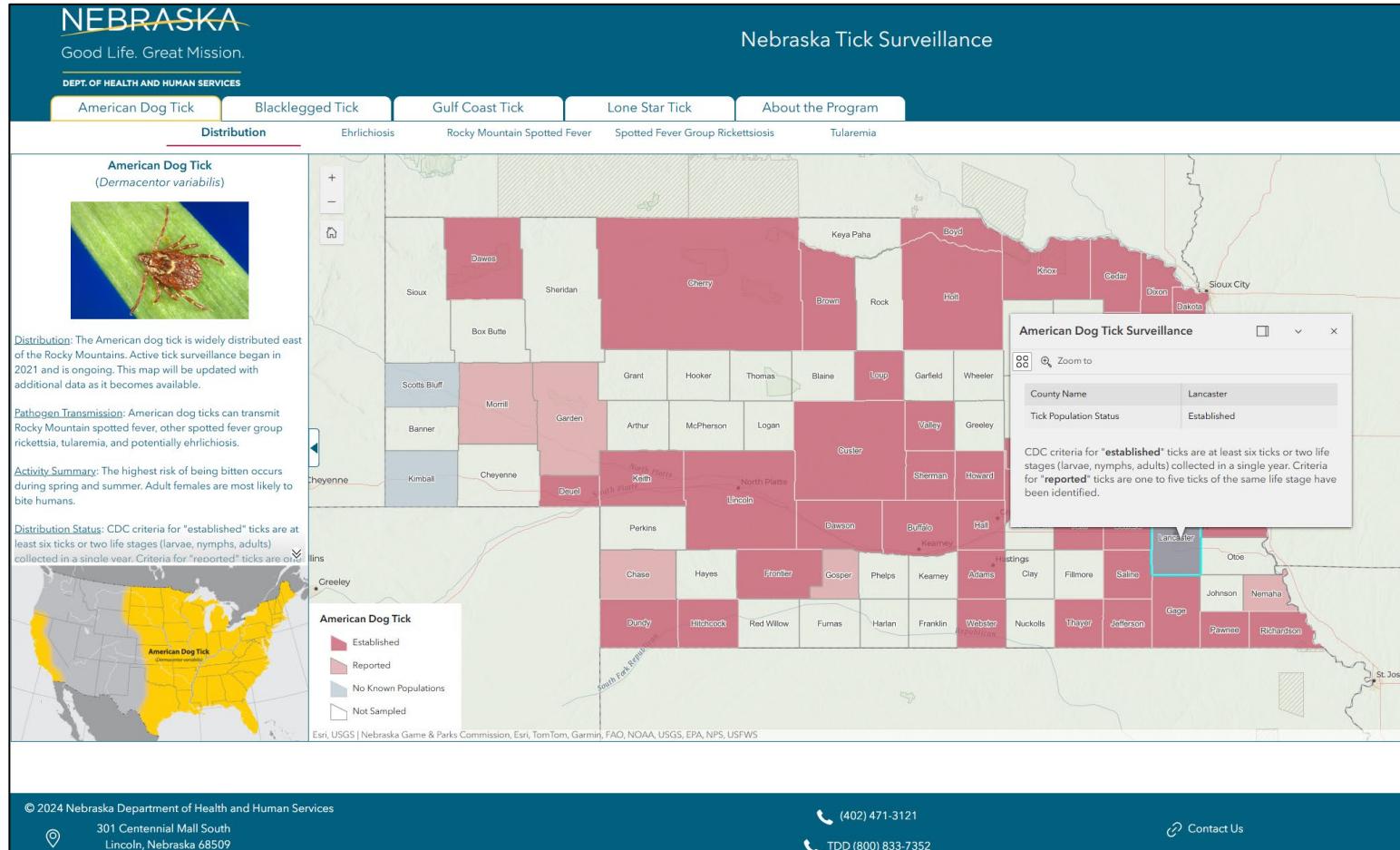
Collected Ticks by Sex, 2025			
Species	Female Count	Male Count	Undetermined*
Lone star tick ( <i>Amblyomma americanum</i> )	360	418	932
American dog tick ( <i>Dermacentor variabilis</i> )	475	451	0
Winter tick ( <i>Dermacentor albipictus</i> )	0	0	0
"Other" rabbit tick ( <i>Ixodes dentatus</i> )	1	0	0
Blacklegged or deer tick ( <i>Ixodes scapularis</i> )	14	13	1
Total	850	882	933

\*Sex was not determined for nymphal or larval ticks

# 2025 Collected Ticks

Tick Species Counts by Life Stage, 2025				
Life Stage				
Species	Adult	Nymph	Larvae	Total
Lone star tick ( <i>Amblyomma americanum</i> )	778	932	0	1710
American dog tick ( <i>Dermacentor variabilis</i> )	926	0	0	926
Winter tick ( <i>Dermacentor albipictus</i> )	0	0	0	0
Rabbit tick ( <i>Haemaphysalis leporispalustris</i> )	0	0	0	0
"Other" rabbit tick ( <i>Ixodes dentatus</i> )	1	0	0	1
Blacklegged or deer tick ( <i>Ixodes scapularis</i> )	27	1	0	28
Total	1732	933	0	2665

# Nebraska Tick Surveillance Maps



Visit the link below to view current and historical tick surveillance data.

Data is updated yearly at the end of each surveillance season.

<https://dhhs.ne.gov/TickMaps>

# 2025 EPI WEEK CALENDAR

Months shown in **RED** are potential “Vector” months

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

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

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

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

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

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

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

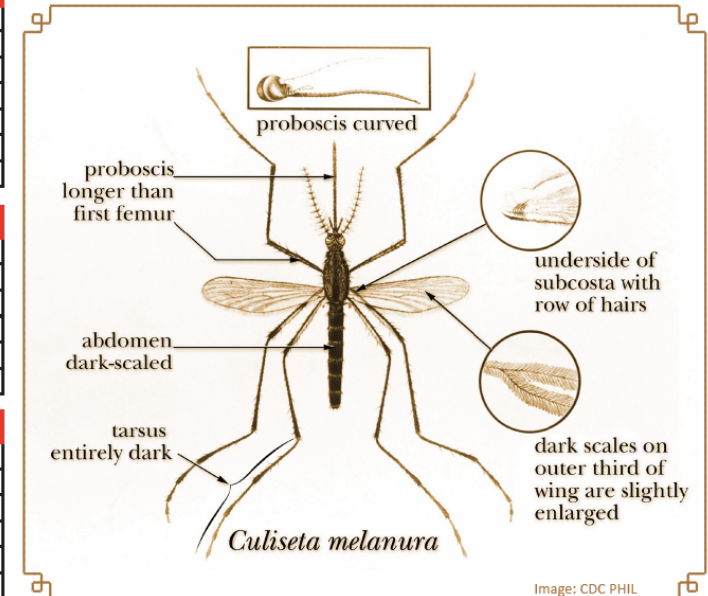
AUGUST							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
31						1	2
32	3	4	5	6	7	8	9
33	10	11	12	13	14	15	16
34	17	18	19	20	21	22	23
35	24	25	26	27	28	29	30
36	31						

SEPTEMBER							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
36		1	2	3	4	5	6
37	7	8	9	10	11	12	13
38	14	15	16	17	18	19	20
39	21	22	23	24	25	26	27
40	28	29	30				


OCTOBER							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
40				1	2	3	4
41	5	6	7	8	9	10	11
42	12	13	14	15	16	17	18
43	19	20	21	22	23	24	25
44	26	27	28	29	30	31	

NOVEMBER							
EPI Week #	Sun	Mon	Tue	Wed	Thu	Fri	Sat
44							1
45	2	3	4	5	6	7	8
46	9	10	11	12	13	14	15
47	16	17	18	19	20	21	22
48	23	24	25	26	27	28	29
49	30						

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



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



**PREVENT  
TICK  
BITES!**

- **WEAR REPELLENT**
- **CHECK FOR TICKS DAILY**
- **SHOWER SOON AFTER  
BEING OUTDOORS**
- **CALL YOUR DOCTOR IF YOU  
GET A FEVER OR RASH**

## Resources

- Nebraska Department of Health and Human Services Tick-Borne Diseases Page:  
<https://dhhs.ne.gov/Pages/Tick-Borne-Diseases.aspx>
- University of Nebraska – Lincoln Tick Tag Go:  
<https://ticktaggo.unl.edu/>
- CDC Tick Webpage: <https://www.cdc.gov/ticks/index.html>
- CDC Tick Bite Data Tracker:  
<https://www.cdc.gov/ticks/tickedvisits/index.html>