



NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

Division of Public Health

North Carolina Tickborne Disease Surveillance Update: May – July 2026

Key Points

- Spotted fever rickettsiosis (SFR) continues to be the most frequently reported tickborne disease in North Carolina, with 213 cases reported so far in 2026.
- A total of 556 tickborne disease cases have been reported to date in 2026, compared with 709 cases reported during the same period in 2025.
 - All reported diseases have decreased this year except anaplasmosis, though case counts may change as investigations continue.
- Active tick surveillance in 2026 is being conducted in Cumberland, Currituck, Lenoir, Pender, and Wilson counties. Lone star ticks were the most frequently collected tick species in both May and June.
 - *The number of ticks collected in July 2026 have not been finalized.
- Animal shelters, veterinary offices and the public may submit ticks for identification to the North Carolina Department of Health and Human Services (NCDHHS) via the [NC Tick Identification Program](#).
 - In 2026, submissions have been received from 15 of North Carolina's 100 counties.
- A total of 364* ticks have been collected through active and passive tick surveillance efforts to date in 2026.

Surveillance Measure	May	June	July	Total 2026
Anaplasmosis Cases	5	3	4	18
Babesiosis Cases	0	1	0	1
Ehrlichiosis Cases	38	67	63	188
Lyme Disease Cases	14	56	45	136
Spotted Fever Rickettsiosis (SFR) Cases	45	85	55	213
Total Ticks Collected via Active Surveillance	13	90	0*	103
Total Ticks Identified via the NC Tick Identification Program (Passive Surveillance)	2	27	225	261

Report specifications:

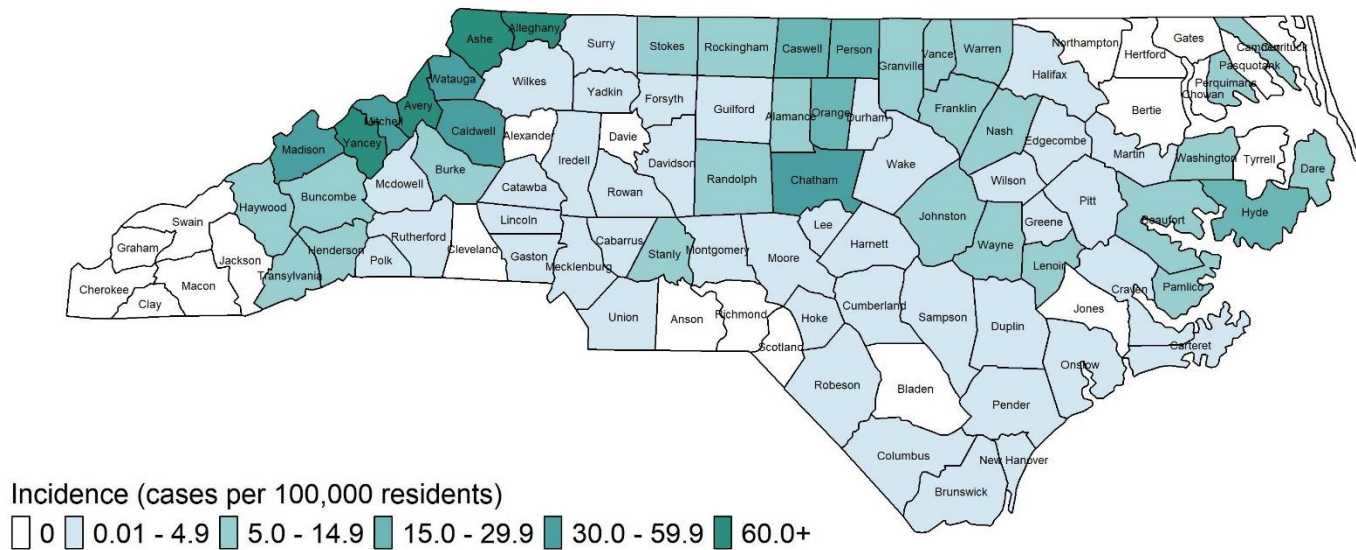
- Cases include those classified as confirmed or probable, per the [surveillance case definitions](#), and are only among NC residents.
- County data are based on the patient's home address at the time of reporting, not necessarily the county or state where they were infected.
- Additional data can be found on the [North Carolina Disease Data Dashboard \(NCD3\)](#) and in [previous annual surveillance summaries](#).
- Annual North Carolina population estimates as of July 1, 2025, were obtained from the U.S. Census Bureau.
- Please note that case classification criteria are subject to change and counts may fluctuate based on these changes.
- Case counts are subject to change as cases remain under investigation. Case counts are assigned according to a hierarchy that uses the earliest available date: symptom onset date, specimen collection date, or the date of initial reporting to public health. As additional information becomes available, the total number of reported cases may increase from what is presented here.

References:

- ¹Morris et al. Tick Species Composition, Collection Rates, and Phenology Provide Insights into Tick-Borne Disease Ecology in Virginia. *Journal of Medical Entomology*. 2022; 59(6): [10.1093/jme/tjac121](#).
- ²Ogden et al. Evidence for Geographic Variation in Life-Cycle Processes Affecting Phenology of the Lyme Disease Vector *Ixodes scapularis* (Acari: Ixodidae) in the United States. *Journal of Medical Entomology*. 2018; 55(6): [10.1093/jme/tjy104](#).
- ³Vandegriff et al. County-level surveillance for the American dog tick (*Dermacentor variabilis*) and Rickettsia species in Kentucky. *Sci Rep*. 2026; 5(16): [10.1038/s41598-026-37422-0](#).
- ⁴Teel et al. County-level surveillance for the American dog tick (*Dermacentor variabilis*) and Rickettsia species in Kentucky. *Journal of Medical Entomology*. 2010; 5(1):[10.1093/jmedent/47.5.707](#).

NC Tickborne Disease Case Distribution

Tickborne Disease** Incidence Rate by County, NC, 2026 to Date



- In 2026, tickborne disease cases** have been reported in 78 of NC's 100 counties, with the highest incidence concentrated in the northwestern region near the Tennessee border. Yancey, Avery, and Alleghany counties have recorded the three highest incidence rates this year, with 168, 101 and 70 cases per 100,000 residents, respectively.
 - May: tickborne disease cases** were reported in 37 of NC's 100 counties.
 - Yancey and Mitchell counties recorded the highest incidence, with 16 and 13 cases per 100,000 residents, respectively.
 - Mecklenburg and Guilford counties reported the lowest incidence, with 0.2 cases per 100,000 residents.
 - June: tickborne disease cases** were reported in 55 of NC's 100 counties.
 - Yancey and Avery counties recorded the highest incidence, with 74 and 56 cases per 100,000 residents, respectively.
 - Mecklenburg and Guilford counties reported the lowest incidence, with 0.1 and 0.4 cases per 100,000 residents, respectively.
 - July: tickborne disease cases** were reported in 54 of NC's 100 counties.
 - Yancey and Avery counties recorded the highest incidence, with 63 and 28 cases per 100,000 residents, respectively.
 - Mecklenburg and Guilford counties reported the lowest incidence, with 0.2 cases per 100,000 residents.

****Tickborne diseases included:** anaplasmosis, babesiosis, ehrlichiosis, Lyme disease, and spotted fever rickettsiosis

Medically Important Tick Species of North Carolina

Tick Species	Blacklegged Tick/ Deer Tick (<i>Ixodes scapularis</i>)			Lone Star Tick (<i>Amblyomma americanum</i>)			American Dog Tick (<i>Dermacentor variabilis</i>)			Gulf Coast Tick (<i>Amblyomma maculatum</i>)		
Disease(s)	Lyme disease, Anaplasmosis, Babesiosis			Ehrlichiosis			Spotted fever rickettsiosis			Spotted fever rickettsiosis		
Tick Life Stages Image												
Tick Life Stages	Larvae	Nymph	Adult	Larvae	Nymph	Adult	Larvae	Nymph	Adult	Larvae	Nymph	Adult
Human Tick Bite Risk (August)	Low	Inactive	Inactive	High	Low	Low	None	None	Low	None	None	High
Human Tick Bite Risk (September)	Low	Inactive	Low	Low	Low	Inactive	None	None	Inactive	None	None	Low
Human Tick Bite Risk (October)	Low	Inactive	High	Low	Low	Inactive	None	None	Inactive	None	None	Low

*Estimated Human Tick-Bite Risk in the Southeast U.S. For August to October Based on Historical Data^{1,2,3,4}

High: The risk of getting bitten by a tick is high due to high tick activity.

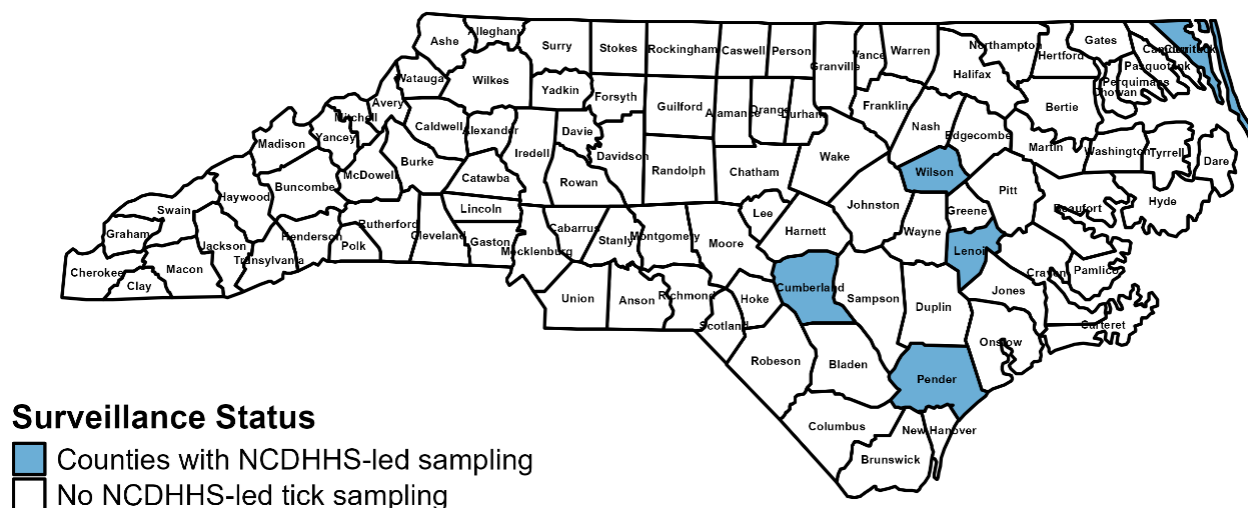
Low: The risk of getting bitten by a tick is low due to low tick activity.

Inactive: This tick life stage is not expected to be active during this time.

None: These tick life stages do not bite humans.

*The human tick-bite risk shown here does not represent the risk specific to North Carolina. Instead, it reflects risk estimates based on overall tick activity patterns observed across the eastern United States. Ticks can be active whenever temperatures exceed approximately 58°F (14°C), although activity depends on additional factors such as humidity and vegetation. This table depicts the periods associated with the highest likelihood of human tick-bite risk, based on regional tick activity patterns and whether the life stage is known to bite humans.

NC Counties Active Tick Surveillance is Being Conducted by NCDHHS, 2026



In 2026, active surveillance is being conducted in Cumberland, Currituck, Lenoir, Pender, and Wilson counties. None of these counties have prior active tick surveillance data. Tick dragging is being conducted at three sites within each county, with a minimum of 800 m² surveyed per site at each visit. Each site will be sampled once per month from May through August and then once in December.