

# Communicable Disease Update

Ashe, Alleghany, and Watauga Counties

April 2026

## COMMUNICABLE DISEASE LANDSCAPE SUMMARY

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- Measles numbers were high through 2025, with North Carolina counties impacted. The only direct impact to our counties, was one individual exposed to someone infectious with measles.
- Tick borne disease cases are starting to increase at this time of year. Diseases like Lyme disease and ehrlichiosis reach their peaks in the summer months, but start their season in early spring. Nymph ticks emerge in the spring, and are similar to the size of a poppyseed.
- Rates of ehrlichiosis cases remain high in Ashe and Watauga Counties, but remain under-identified in the High Country overall. Ehrlichiosis presents with symptoms very similar to spotted fever rickettsiosis.
- Food and waterborne diseases remain prevalent in the High Country, with higher rates than the broader state. Residents of Ashe, and Watauga counties are more at risk of Campylobacteriosis than those in the broader state.

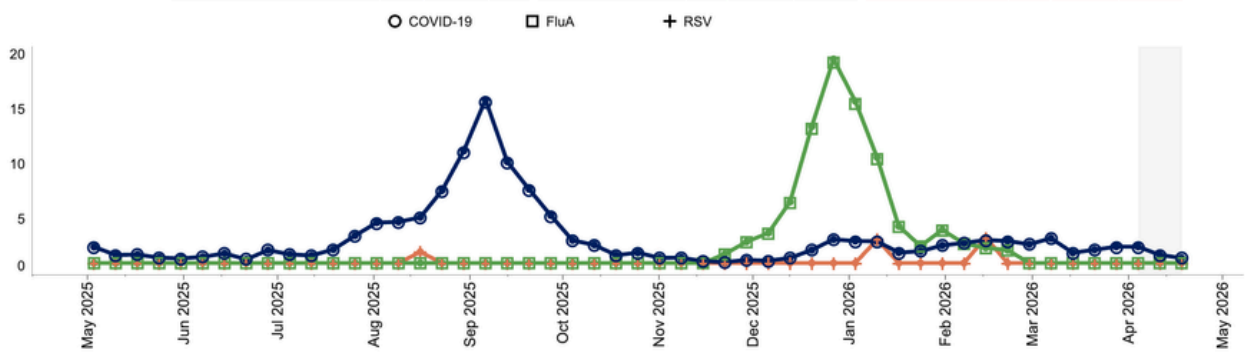
# North Carolina Respiratory Surveillance Data Update

Data from NCDHHS Respiratory Disease Dashboard accessed 4/22/2026

## STATE WASTEWATER SURVEILLANCE DATA

NCDHHS tracks the level of flu, COVID, and RSV shed into wastewater. This metric provides a reliable population level picture of the amount of virus at the community level. Viral activity levels are shown on a spectrum, with very low, low, moderate, high, and very high levels.

Wastewater viral activity levels may indicate the risk of infection in an area. The wastewater viral activity levels statewide are: **1.5 for COVID-19 (Very Low)** **1.0 for FluA (Very Low)** **1.0 for RSV (Very Low)**



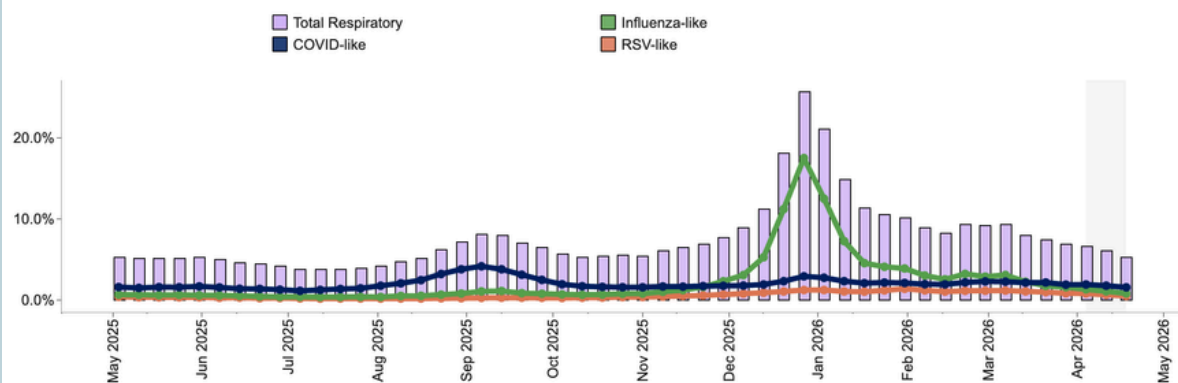
The wastewater viral activity level indicates whether the amount of virus in the wastewater is Very Low, Low, Moderate, High or Very High. Levels vary by virus.

(NCDHHS, 2026)

## EMERGENCY DEPARTMENT VISITS FOR RESPIRATORY VIRUS

This metric shows the percent of emergency department visits that are for symptoms or diagnoses of COVID-19, RSV, flu, and all acute respiratory illnesses combined. This metric provides an early indication of rising levels of respiratory illness in the community, and insight into the burden on local emergency departments.

Latest Week: **5.3% of emergency room visits** had symptoms of a respiratory virus, a decrease from the week before. (The week before was 6.0%.)



Percentage of North Carolina emergency department visits with symptoms or a diagnosis of a respiratory virus. [More Info](#)

(NCDHHS, 2026)

# Communicable Disease Burden by County

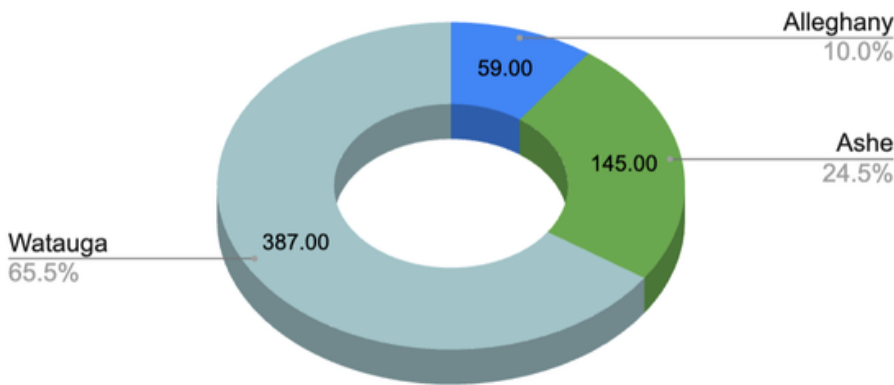
Data from the North Carolina Electronic Disease Surveillance System accessed 4/13/2026

Communicable diseases are illnesses caused by infectious agents or their toxins that are transmitted from an infected person, animal, or environmental source to a person. These diseases' potential to significantly impact populations makes surveillance and control essential for protecting public health. Local health departments like AppHealthCare receive and investigate reports of communicable disease outbreaks.

## Communicable Disease Burden

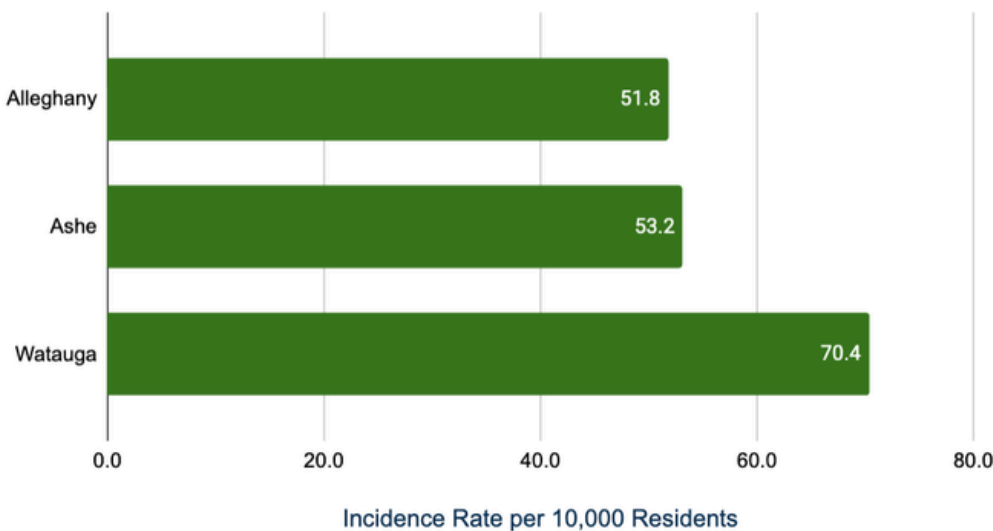
For every potential communicable disease case that arises, AppHealthCare investigates the information to determine if it truly fits the definition of a communicable disease case, and collects information for communicable disease control and surveillance. For cases that include food establishments, AppHealthCare investigates for any linkages between cases. For cases where there's a risk to others, AppHealthCare notifies those who may be at risk and connects them to treatment to prevent them from getting sick when available. AppHealthCare informs those who are exposed of what they need to do to monitor themselves, and what to do if they were to get sick. For every communicable disease case, there are a myriad of subsequent steps required to protect the broader community. The graphs below illustrate the number of cases that are identified as communicable disease cases by county, and the number of cases relative to the population of the county. These cases are only a fraction of those investigated by AppHealthCare.

### 2025 Communicable Disease Burden by County



The communicable disease burden illustrates the number of cases per county in 2025, and the proportion each county is of the total cases across Alleghany, Ashe, and Watauga counties.

### Incidence Rate of Communicable Disease Cases by County



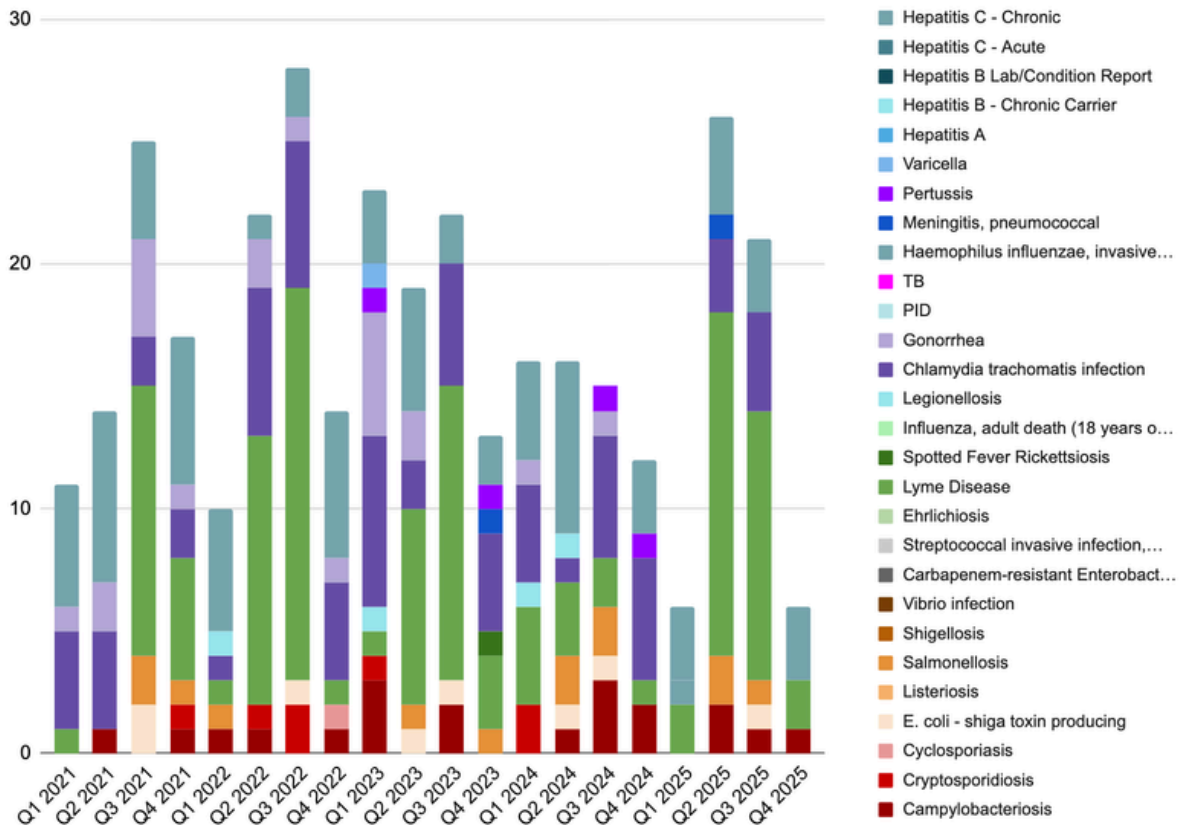
The incidence rate of communicable disease cases by county is the communicable disease burden relative to the size of the county. The graph illustrates the number of communicable disease cases per 10,000 residents of each county.

# Allegheny County Updates

Data from NCDHHS and the North Carolina Electronic Disease Surveillance System accessed 4/13/2026

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## Allegheny County Quarterly Communicable Disease Cases



### Allegheny Communicable Disease Trends

- Diseases that spread through food or water increase in the summer. Food and waterborne illness rates remain high.
- Lyme disease cases remain the most prevalent tick borne disease in the county, with most cases seen during the spring and summer. 2025 brought particularly high rates of Lyme diseases.
- Allegheny residents had 59.7 times the risk of getting Lyme disease as compared to the rest of North Carolina in 2025 according to preliminary data (95% CI 41.1, 86.8).
- Chlamydia and gonorrhea remain common across the county.

### Allegheny Food and Waterborne Disease Cases by Year



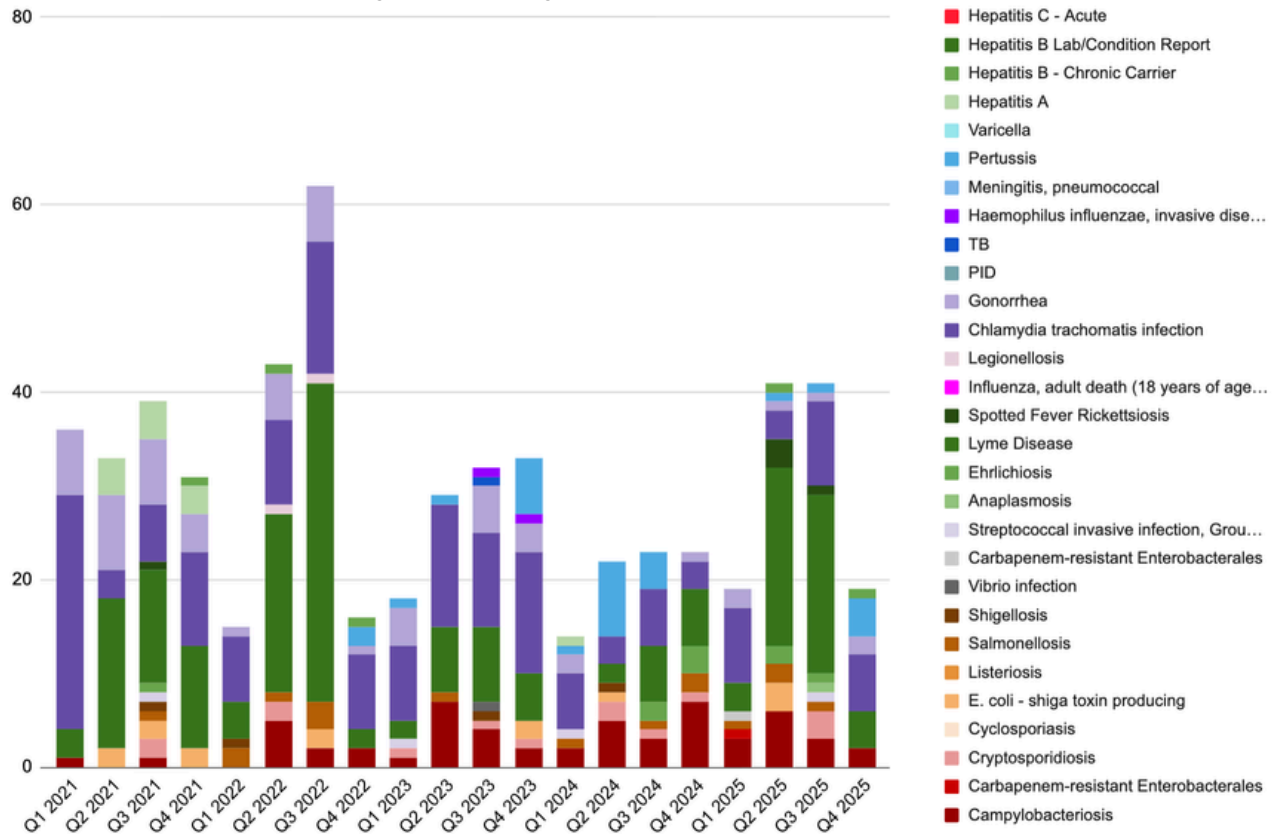
North Carolina incidence rates from the North Carolina Interactive Disease Data Dashboard, which only provide confirmed and probable cases, where the data for Allegheny County includes suspect cases as well for diseases spread by ticks. For more information, refer to 'Data Notes' page.

# Ashe County Updates

Data from the North Carolina Electronic Disease Surveillance System, accessed 4/13/2026.

Communicable diseases are illnesses caused by infectious agents or their toxins that are transmitted from an infected person, animal, or environmental source to a person. These diseases' potential to significantly impact populations makes surveillance and control essential for protecting public health. Local health departments like AppHealthCare receive and investigate reports of communicable disease outbreaks.

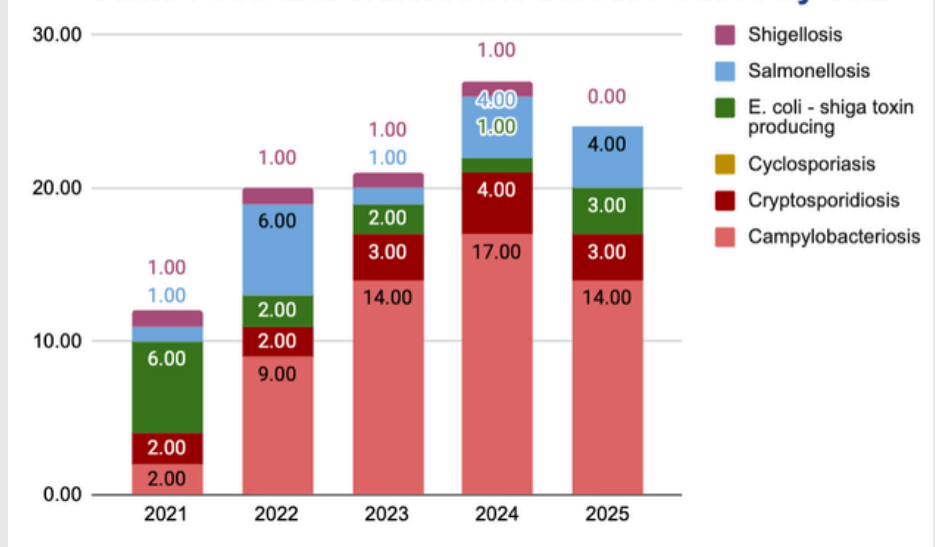
## Ashe County Quarterly Communicable Disease Cases



### Ashe Communicable Disease Trends

- Ashe County saw an increase in tick borne disease cases this year, with Lyme disease cases growing significantly. Lyme disease cases remain the most prevalent tick borne disease in the county, with most cases seen during the spring and summer.
- Diseases that spread through food or water have remained common.
- Rates of other tick-borne diseases like ehrlichiosis and spotted fever rickettsiosis (commonly referred to as Rocky Mountain Spotted Fever) have been increasing overall, over the course of a few years.
- Chlamydia and gonorrhea remain common across the county.

### Ashe Food and Waterborne Disease Cases by Year



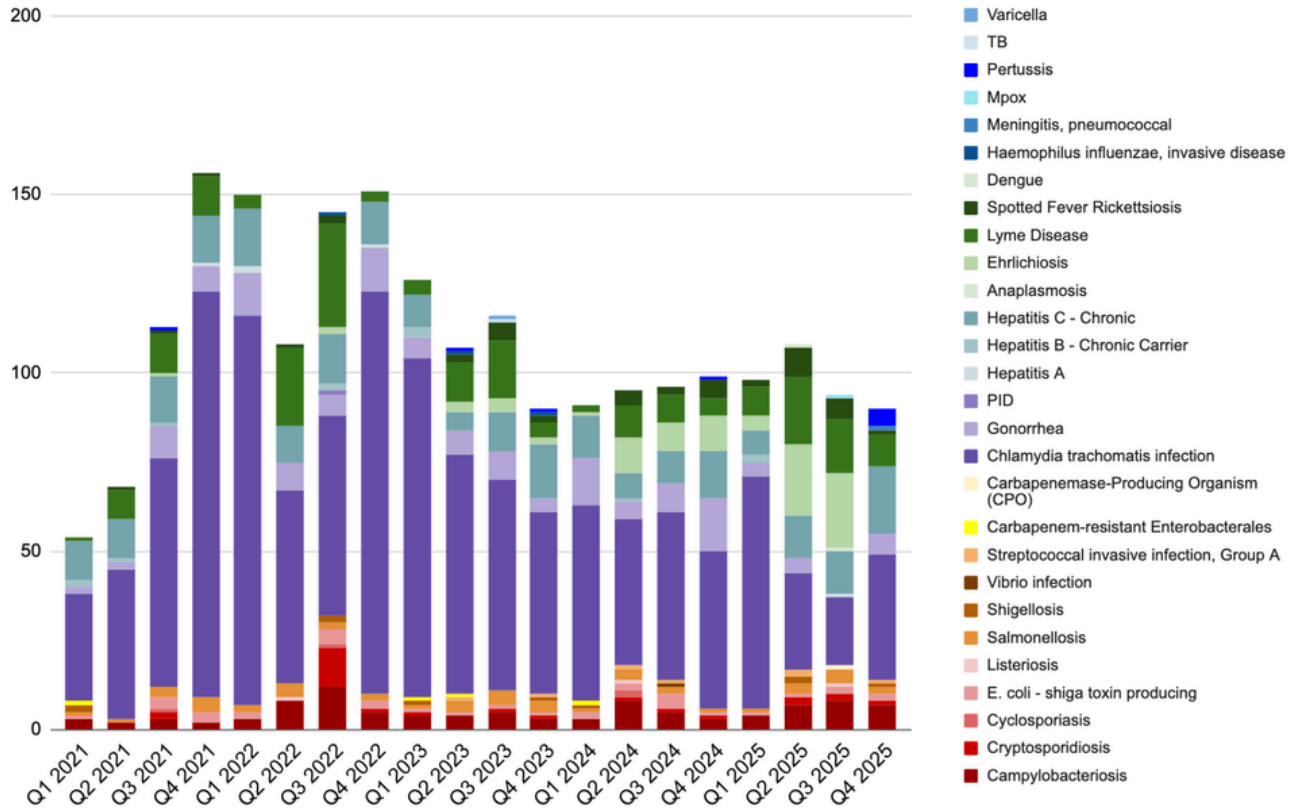
North Carolina incidence rates from the North Carolina Interactive Disease Data Dashboard, which only provide confirmed and probable cases, where the data for Ashe County includes suspect cases as well for diseases spread by ticks. For more information, refer to 'Data Notes' page.

# Watauga County Updates

Data from the North Carolina Electronic Disease Surveillance System, accessed 4/13/2026.

Communicable diseases are illnesses caused by infectious agents or their toxins that are transmitted from an infected person, animal, or environmental source to a person. These diseases' potential to significantly impact populations makes surveillance and control essential for protecting public health. Local health departments like AppHealthCare receive and investigate reports of communicable disease outbreaks.

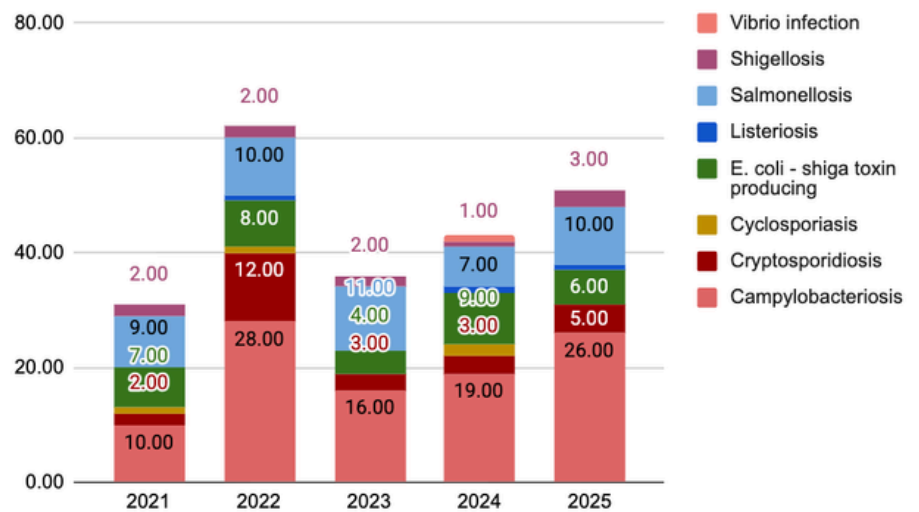
## Watauga County Quarterly Communicable Disease Cases



### Watauga Communicable Disease Trends

- Chlamydia remains the most common communicable disease in Watauga County but saw decreases in the last three quarters of the year as compared to average chlamydia levels by quarter.
- Diseases that spread through food or water have continued at high rates in Watauga County in 2025.
- Spotted fever rickettsiosis has continued on the rise in Watauga County, as has ehrlichiosis. Cases of identified tick-borne diseases increased in 2025.
- Watauga County residents had 22.7 times the risk (95% CI 17.0, 30.3) of getting Lyme disease as compared to the rest of North Carolina in 2025, according to preliminary data.

### Watauga Food and Waterborne Disease Cases by Year



North Carolina incidence rates from the North Carolina Interactive Disease Data Dashboard, which only provide confirmed and probable cases, where the data for Watauga County includes suspect cases as well for diseases spread by ticks. For more information, refer to 'Data Notes' page.

# 2025 Tick-Borne Disease Data

Data from the North Carolina Electronic Disease Surveillance System, accessed 4/13/2026.

In North Carolina, tick borne disease data are underreported and underdiagnosed. Data presented here reflect the total numbers of cases that are “confirmed,” “probable,” and “suspect,” due to case classification under-identification resulting from a high number of individuals who do not complete second tier testing, and due to reporting gaps.

## Lyme disease

Lyme disease is an illness caused by the bacteria *Borrelia burgdorferi*, transmitted by the bite of an infected blacklegged tick. **Alleghany residents had 59.7 times the risk of getting Lyme disease** as compared to the rest of North Carolina in 2025 according to preliminary data (95% CI 41.1, 86.8), **Ashe County residents had 40.0 times the risk** (95% CI 29.4, 54.3), and **Watauga County residents had 22.7 times the risk** (95% CI 17.0, 30.3) than the broader state according to preliminary data.

The risk of contracting Lyme disease for North Carolina residents in 2025 was 4.5 cases per 100,000 people, where the risk of getting Lyme disease in the same timeframe was 254.9 cases per 100,000 residents in Alleghany County, 165.0 cases per 100,000 residents in Ashe County, and 92.7 cases per 100,000 residents in Watauga County according to preliminary data.

## Rickettsiosis

Spotted fever rickettsioses are a group of diseases caused by closely related bacteria, that includes Rocky Mountain spotted fever (RMSF). These bacteria are spread to people through the bite of infected ticks and mites. **Due to the overlap in symptomology, when RMSF or rickettsiosis are being considered, ehrlichiosis should be considered as well.**

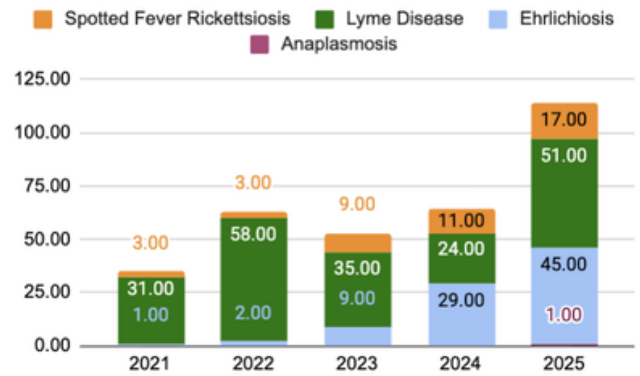
**Watauga residents had 9.1 times the risk** of getting spotted fever rickettsiosis as compared to the rest of North Carolina in 2025 according to preliminary data (95% CI 5.6, 14.8).

## Ehrlichiosis

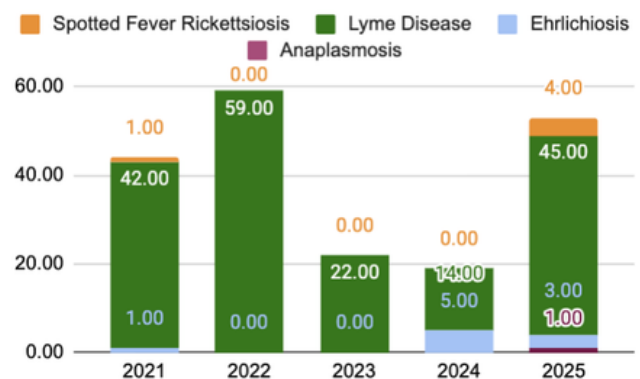
Ehrlichiosis is the general name used to describe diseases caused by ehrlichia bacteria. Ehrlichiosis is primarily spread to people through tick bites from lone star ticks and deer ticks. Due to the overlap in symptomology spotted fever rickettsiosis is indicated, ehrlichiosis should be considered as well. Ehrlichiosis is under-identified in Alleghany, Ashe, and Watauga Counties.

**Watauga residents had 32.1 times the risk** of getting ehrlichiosis as compared to the rest of North Carolina in 2025 according to preliminary data (95% CI 23.4, 44.0), and **Ashe residents had 3.8 times the risk** than the broader state (95% CI 1.2, 11.7) according to preliminary data.

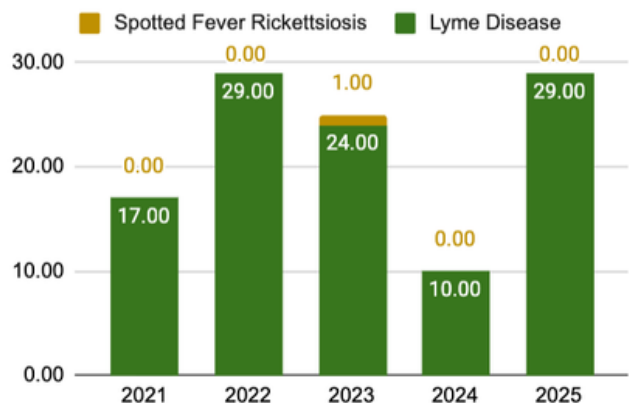
### Watauga Tick-Borne Disease Cases by Year



### Ashe Tick-Borne Disease Cases by Year



### Alleghany Tick-Borne Disease Cases by Year



# The Impact of Communicable Disease Management Work on the Community

Communicable disease programs protect the community by:

Supporting school nurses and daycare workers when there are communicable disease cases in schools or daycares, from notifying those who have been exposed, to providing guidance on cleaning and keeping other kids safe.

Ensuring our farmworkers have access to vaccines against communicable diseases to keep them safe, and to prevent missed work and the resulting impacts on farms.

Helping long term care facilities like nursing homes prevent or manage disease outbreaks to keep our community's most vulnerable populations safe.

Monitoring community members who have been exposed to high-risk diseases. This has commonly looked like calling local farmers who have been exposed to bird flu after they have been exposed to an infected animal, or monitoring missionaries returning from countries where they were exposed to a disease like Ebola virus.

Quickly offering treatment to prevent illness in infants and pregnant folks when they have been exposed to a disease like pertussis that can be exceptionally dangerous to pregnant folks and babies.

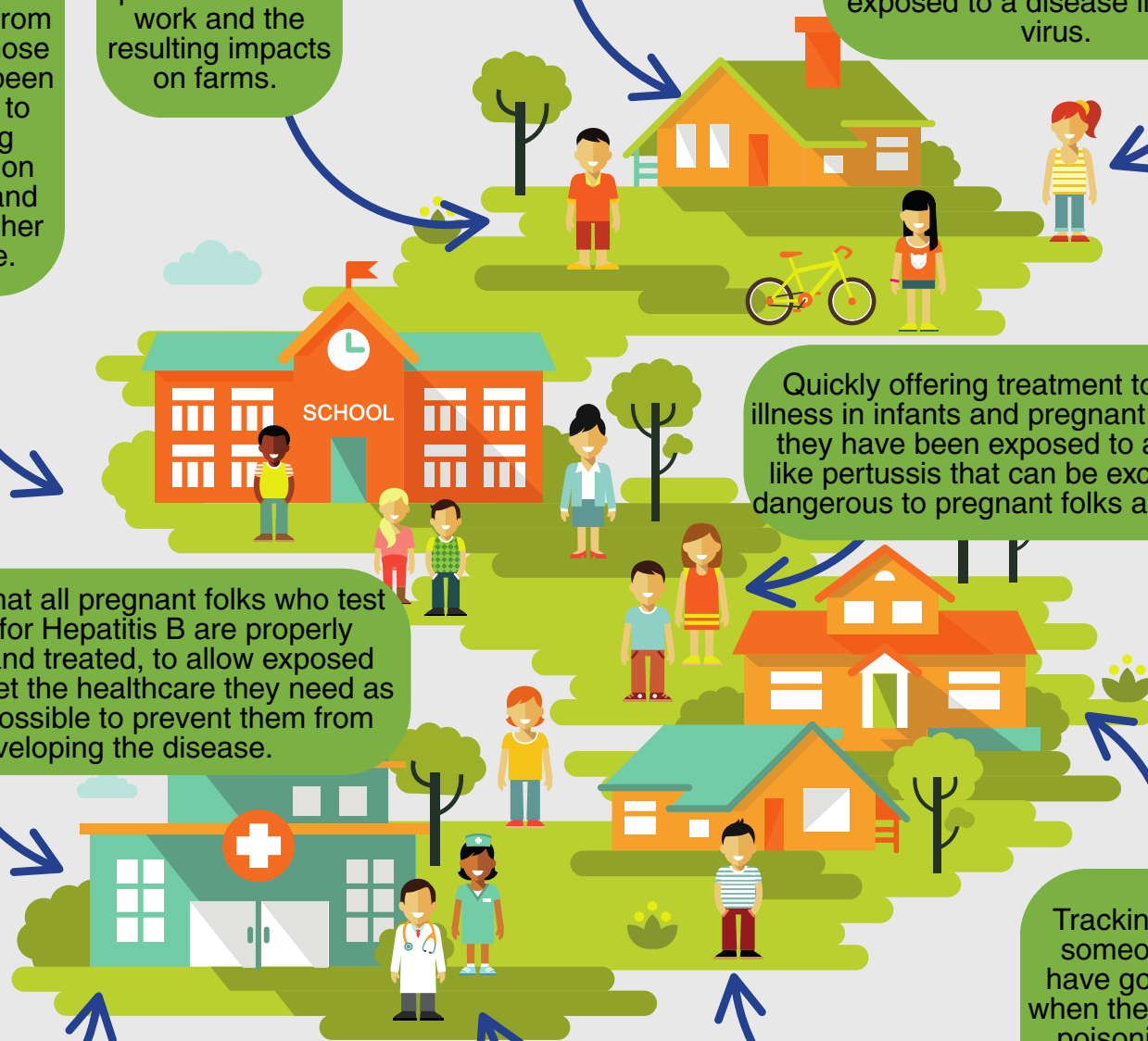
Ensuring that all pregnant folks who test positive for Hepatitis B are properly followed and treated, to allow exposed babies to get the healthcare they need as soon as possible to prevent them from developing the disease.

Tracking where someone may have gotten sick when they get food poisoning, and identifying patterns of illness. Following up and educating restaurants and businesses when concerns arise.

Preventing citizens from accumulating medical costs of rabies prevention treatment by responding to every animal bite in the community, and testing animals when possible, preventing the unnecessary treatment of people.

Educating doctors on local disease trends, so they know what diseases are common in the community.

Confirming patients with tuberculosis take their medication every single day, to prevent the risk to others and the spread of the deadly disease.



# References and Data Notes

## References

North Carolina Department of Health and Human Services (2026). COVID-19 data dashboard.

<https://covid19.ncdhhs.gov/dashboard>

North Carolina Department of Health and Human Services (2025). Interactive Data Dashboard (NCD3).

<https://epi.dph.ncdhhs.gov/cd/figures.html>

North Carolina Electronic Disease Surveillance System (2025). North Carolina Division of Public Health, North Carolina Department of Health and Human Services.

## Data Notes

Cases are categorized by the reporting county, and have been updated to include both confirmed and probable cases. The county associated with each case indicates where the individual is a resident, and does not inherently indicate where they contracted the disease. For tick-borne diseases, suspect cases are also included due to the disease landscape and local prevalence of infected ticks in addition to known reporting and confirmatory testing barriers in reaching probable or confirmed case definitions. While suspect cases are accessible for local county data, state numbers remain preliminary and do not yet include suspect case data. Confirmed and probable cases are classified based on case definitions for the respective disease according to the NC Communicable Disease Manual and as classified in the North Carolina Electronic Disease Surveillance System. Surveillance case definitions of “confirmed,” “probable,” “suspect,” etc. are not intended to be used by healthcare providers for making a clinical diagnosis or determining how to meet an individual patient’s health needs. Cases not reported include sensitive cases that may be identifiable due to low numbers and concerns for patient identity and privacy. Cases are categorized monthly based on their earliest date of their symptoms, or if unavailable or not relevant, their test date. Due to delays in reporting, data in recent months may be incomplete, and data in prior months may change as cases are reported. For further data on communicable diseases in NC counties by year, refer to the North Carolina Division of Public Health, North Carolina Disease Data Dashboard.

Data that are displayed quarterly follow the calendar year, with the first quarter including January-March, the second including April through June, the third including July through September, and the fourth including October through December of the respective year.



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