

## Can you identify Lyme Disease and other tickborne diseases across the variation of disease?

Tickborne diseases are a serious health concern in Vermont, and are locally transmitted by the blacklegged tick, *Ixodes scapularis*. Reports of tickborne diseases are on the rise and most common from April through August when the abundance of host-seeking tick nymphs is highest. While [Lyme disease](#) remains the most common tickborne disease in Vermont, other diseases like [anaplasmosis](#) and [babesiosis](#) are becoming more common. Vermont health professionals are essential partners in tickborne disease prevention and surveillance efforts.

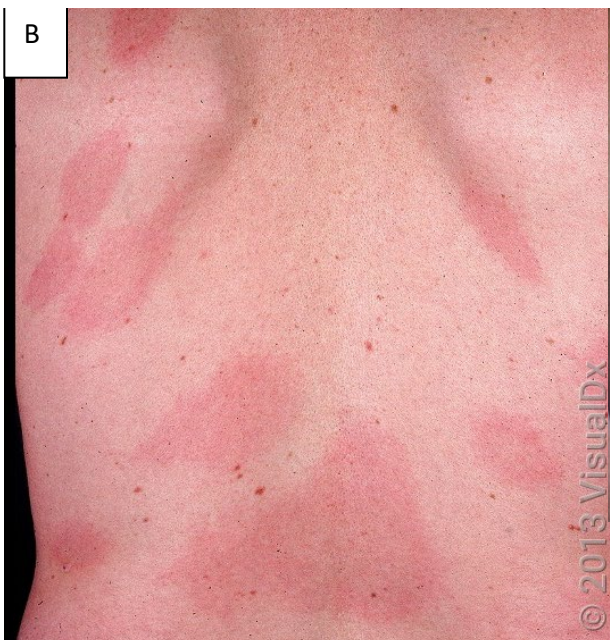
By using VisualDx, clinicians can appreciate the spectrum of disease. Approximately 70% of patients with Lyme disease present with erythema migrans, a circular, expanding rash with target-like appearance which may be more subtle in darker skin (picture A). Patients with disseminated infection can present with scattered erythematous patches (picture B) or a large annular plaque (picture C).



Large erythematous patch of Lyme disease is subtle and can easily be missed in patients of color.



Classic targetoid, erythematous patch of Lyme disease is easily seen.



Tickborne diseases can be difficult to diagnose, particularly in the early stages of illness with antibody-based tests. Patients should be treated presumptively based on clinical suspicion while awaiting test results. Doxycycline may be used as first-line treatment for suspected Lyme disease (i.e., [erythema migrans rash](#)) or anaplasmosis in patients of all ages.

Beginning in 2022, the national case definition for Lyme disease no longer requires the reporting of clinical information to the Health Department. This change to laboratory-based surveillance will improve standardization of reporting and comparability of case counting among high-incidence states, like Vermont. We anticipate that using a laboratory-based approach will increase annual case estimation by about 20% compared to previously reported averages in recent years.

This change in reporting is only applicable to Lyme disease. Other reportable tickborne infections that are locally transmitted in Vermont from the bite of infected blacklegged ticks (*Ixodes scapularis*) include:

- [Anaplasmosis](#)
- [Babesiosis](#)
- [Borrelia miyamotoi infection](#)
- [Powassan virus encephalitis](#)

Reportable tickborne infections that are less common because they are acquired outside of Vermont and transmitted by different species of ticks include:

- [Ehrlichiosis](#)
- [Spotted fever rickettsiosis \(e.g., Rocky Mountain spotted fever\)](#)

**Electronic case reporting to the Vermont Department of Health can be done in VisualDx in the diagnosis links above.**