

Misinformation about Lyme disease in Vermont is widespread. An informal analysis of Vermont newspaper, newsletters, and media reports about Lyme disease from 2014-2016 revealed contradicting and inaccurate statements about Lyme disease symptoms, diagnosis, and treatment. Information about other tick-borne infections present in Vermont was also limited or absent.

Some examples are listed below:



## VT Media About Lyme Disease

## Lyme Disease Summary

### 'Bullseye' Rash

- ▶ "Only one in three people ever get the tell-tale 'bull's-eye' rash that's associated with an infected tick bite." - VT Sports
- ▶ "It occurs in up to 80% of people." - VT Fish and Wildlife
- ▶ "In Vermont only three of four cases have a rash." -WPTZ
- ▶ "The trademark bullseye rash ... almost always appears that when a person has been bitten by a tick infected with Lyme..." - WCAX
- ▶ "You should find it 70 to 80% of the time." - KIDS VT

The Vermont Department of Health 2014 Lyme disease surveillance report showed less than half of the children in Vermont with Lyme disease had an EM rash (49.5%). The same report showed an EM rash was present in 66.9% of confirmed adult cases of Lyme disease.

### Tick Attachment:

- ▶ "Transmission can be prevented if the tick is removed within about 36 hours." - Newport Dispatch
- ▶ "It takes the deer tick anywhere from 36 to 48 hours to inject the bacteria into the skin. By that point the tick has usually dislodged itself and fallen off the body, thus usually preventing the disease from occurring." - Kids VT
- ▶ "If you do find a tick on you, it should be properly removed as soon as possible as it can take 36 hours for a tick to transmit the bacteria which causes Lyme disease." - NW Medical Center
- ▶ "It turns out that it takes time for a tick to reliably transmit B. burgdorferi to humans - about 36 to 48 hours." - University of VT Medical Center
- ▶ "If the tick is in for less than 36 hours, remove the tick. No further treatment is needed." - Charlotte News

Studies have shown ticks are able to transmit the bacteria that causes Lyme disease in animal models in as little as 16 hours. According to a 2015 literature review, no minimum attachment time for transmission of infection has ever been established. The Vermont Department of Health advised, if a tick is attached to your skin for less than 36 hours, "just in case, monitor your health closely and be on the alert for symptoms of Lyme disease."

### Timing of Lyme Disease Symptoms

- ▶ "Seven to 14 days after the tick bite, but sometimes it takes up to 30 days" - VT Digger
- ▶ "Monitoring your health in the days after a tick bit is crucial."-WPTZ
- ▶ "Lyme symptoms generally appear one to two weeks after a bite." - Kids VT
- ▶ "The initial symptoms of Lyme disease occur within one to three weeks of a tick bite." -Brandon Reporter

Vermont Department of Health stated "symptoms of disseminated Lyme disease can occur days to months after the initial infection", and "neurological problems can occur weeks or months after a tick bite."

### Treatment for Lyme Disease

- ▶ "With antibiotic treatment the infection will cause no further harm." - Brandon Reporter
- ▶ "Relapse and incomplete treatment responses occur with some people developing long-term complications." - Rutland Hospital
- ▶ "The disease is curable and preventable." - MyChamplainValley.com
- ▶ "The problems often get better with antibiotics, but in rare cases they can last the rest of your life." - UVMHealth.org
- ▶ "Late Lyme is a challenge to diagnose and, when found, is treated with prolonged antibiotics."-Charlotte News
- ▶ "Long-term IV antibiotics are not indicated for Lyme disease." - University of VT Medical Center

Approximately 10-20% of people treated for Lyme disease have continuing symptoms a year after treatment. Some individuals have been disabled by Lyme. The earlier a person is diagnosed with Lyme disease, the more likely standard treatment will work. Most people recover fully from Lyme disease when it is promptly diagnosed and treated.

### Diagnosis of Lyme Disease

- ▶ "Early diagnosis of Lyme disease should be made on the basis of symptoms and history of tick bite." - UVM Extension
- ▶ "Only about 30% of people who develop this rash actually recall having a tick bite." - Mt Ascutney Hospital
- ▶ "There is a fairly high rate of false negative results from this [blood] test, so we do not use it as an exclusive diagnostic tool." - Brattleboro Hospital
- ▶ Lyme disease can be confirmed by a blood test." - USDA via GMNF

According to the CDC Lyme disease is "diagnosed based on symptoms, physical findings and the possibility of exposure to infected ticks." A negative blood test does not mean you do not have Lyme disease. False negatives and false positives do occur.