

## **SUMMARY OF ACTIVE TICK SURVEILLANCE TESTING RESULTS 2024**

A total of 4,346 ticks (adults, nymphs, and larvae) across multiple genera were collected from 40 pre-determined, publicly accessible sites in all 8 counties throughout Connecticut in 2024. Of the more than 4,300 ticks collected, 3,503 (80.6%) were *Ixodes scapularis* (deer or blacklegged tick), 74 (1.7%) were *Dermacentor variabilis* (American dog tick), 72 (1.7%) were *Amblyomma americanum* (lone star tick), 696 (16.0%) were *Haemaphysalis longicornis* (Asian longhorned tick), and only 1 (0.0%) was identified as *Haemaphysalis leporispalustris* (rabbit tick) (Table 1).

Table 1. Tick species distribution in the 2024 sampling year.

Scientific Name	Common Name	Total Number of Ticks Collected (%)
<i>Ixodes scapularis</i>	Deer or blacklegged tick	3,503 (80.6%)
<i>Dermacentor variabilis</i>	American dog tick	74 (1.7%)
<i>Amblyomma americanum</i>	Lone star tick	72 (1.7%)
<i>Haemaphysalis longicornis</i>	Asian longhorned tick	696 (16.0%)
<i>Haemaphysalis leporispalustris</i>	Rabbit tick	1 (0.0%)

A portion of the collected ticks were tested, and of the 1,025 adult female blacklegged ticks screened for infection, 822 (80.2%) tested positive for at least one pathogen, and 180 (17.6%) verified positive for two or more pathogens. Overall, more than half of all ticks, 556 (54.2%) tested positive for *B. burgdorferi* (Table 2).

Table 2: Statewide infection rate for adult female *Ixodes scapularis* in 2024.

Pathogen	Disease	% Adult female blacklegged ticks infected
<i>Borrelia burgdorferi</i> (single pathogen)	Lyme disease	376 (36.7%)
<i>Borrelia miyamotoi</i>	Tick-borne relapsing fever	29 (2.8%)
<i>Babesia microti</i>	Babesiosis	160 (15.6%)
<i>Anaplasma phagocytophilum</i>	Anaplasmosis	74 (7.2%)
Powassan virus	Encephalitis and meningitis	3 (0.3%)
<i>B. burgdorferi</i> + <i>miyamotoi</i>	Lyme and Tick-borne relapsing fever	15 (1.5%)
<i>B. burgdorferi</i> + <i>microti</i>	Lyme and Babesiosis	105 (10.2%)
<i>B. burgdorferi</i> + <i>Anaplasma</i>	Lyme and Anaplasmosis	38 (3.7%)
<i>B. burgdorferi</i> + Powassan	Lyme and Encephalitis/meningitis	0 (0.0%)
<i>B. burgdorferi</i> /miyamotoi/Babesia/ <i>Anaplasma</i> /Powassan	Lyme/TBRF/Babesiosis/Anaplasmosis/Encephalitis	22 (2.1%)

Of the 629 nymphal blacklegged ticks tested, a total of 308 (49%) tested positive for at least one pathogen, and a total of 89 (14.1%) tested positive for two or more pathogens. Overall, 182 (29%) ticks screened were positive for infection with *B. burgdorferi* (Table 3).

Table 3: Statewide infection rate for nymphal *Ixodes scapularis* in 2024.

Pathogen	Disease	% Nymphal blacklegged ticks infected
<i>Borrelia burgdorferi</i> (single pathogen)	Lyme disease	93 (14.8%)
<i>Borrelia miyamotoi</i>	Tick-borne relapsing fever	10 (1.6%)
<i>Babesia microti</i>	Babesiosis	103 (16.4%)
<i>Anaplasma phagocytophilum</i>	Anaplasmosis	13 (2.1%)
Powassan virus	Encephalitis and meningitis	0 (0.0%)
<i>B. burgdorferi</i> + <i>miyamotoi</i>	Lyme and Tick-borne relapsing fever	6 (1.0%)
<i>B. burgdorferi</i> + <i>microti</i>	Lyme and Babesiosis	55 (8.7%)
<i>B. burgdorferi</i> + <i>Anaplasma</i>	Lyme and Anaplasmosis	15 (2.4%)
<i>B. burgdorferi</i> + Powassan	Lyme and Encephalitis/meningitis	0 (0.0%)
<i>B.burgdorferi/miyamotoi/Babesia/Anaplasma/Powassan</i>	Lyme/TBRF/Babesiosis/Anaplasmosis/Encephalitis	13 (2.1%)

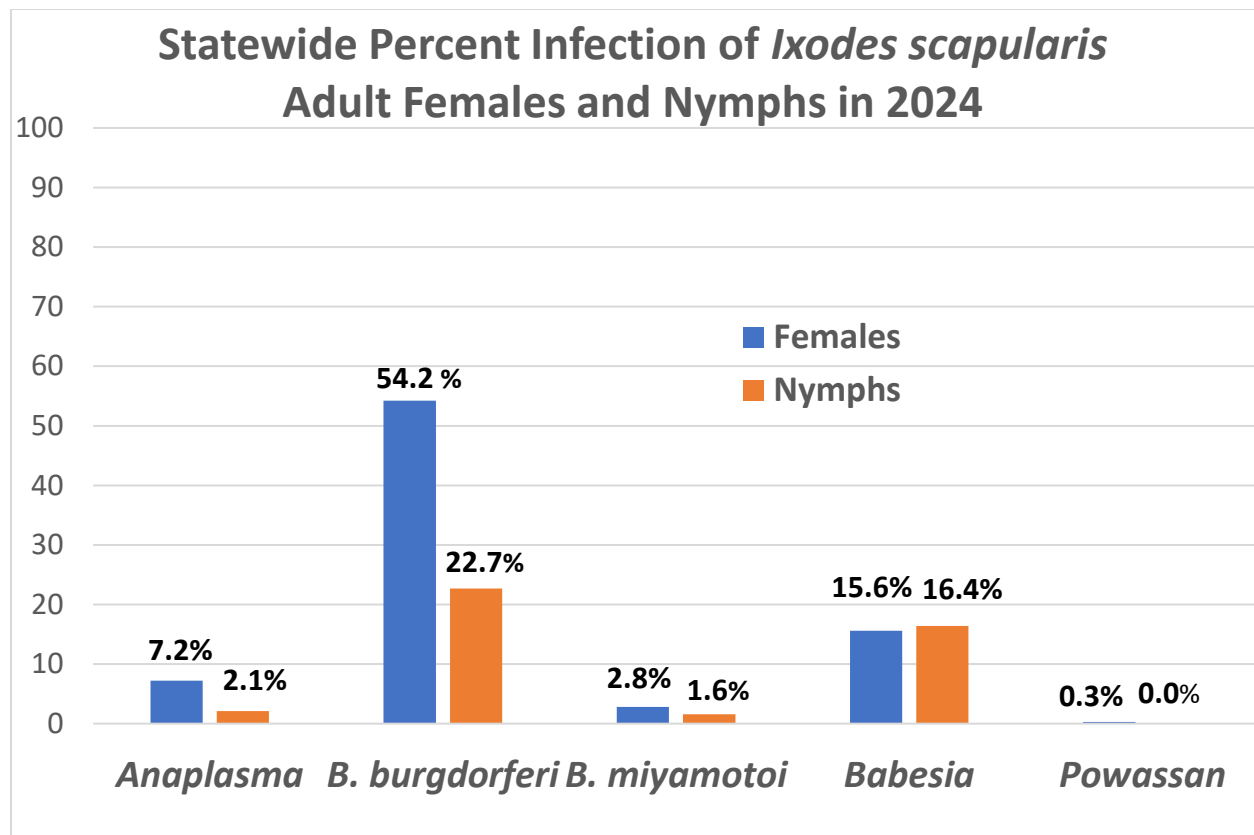


Figure 1: 2024 Statewide Percent Infection Rates for Adult females and Nymphs