

SUMMARY OF ACTIVE TICK SURVEILLANCE TESTING RESULTS 2019

A total of 2,516 ticks across multiple genera were collected from 40 pre-determined, publicly accessible sites in all 8 counties throughout Connecticut in 2019. Of the more than 2,500 ticks collected, 2,071 (82.3%) were *Ixodes scapularis* (deer or blacklegged tick), 440 (17.5%) were *Dermacentor variabilis* (American dog tick), 4 (0.16%) were *Amblyomma americanum* (lone star tick), and only 1 (0.04%) tick was identified as *Haemaphysalis longicornis* (Asian longhorned tick) (Table 8).

Table 8. Tick species distribution in the 2019 sampling year.

Scientific Name	Common Name	Total Number of Ticks Collected (%)
<i>Ixodes scapularis</i>	Deer or blacklegged tick	2,071 (82.3%)
<i>Dermacentor variabilis</i>	American dog tick	440 (17.5%)
<i>Amblyomma americanum</i>	Lone star tick	4 (0.16%)
<i>Haemaphysalis longicornis</i>	Asian longhorned tick	1 (0.04%)

Of the 642 adult female blacklegged ticks tested, a total of 469 (73.1%) tested positive for any pathogen, and 99 (15.4%) tested positive for two or more pathogens. Overall, accounting for single and co-infection rates, nearly half of all ticks, 309 (48.1%), tested positive for infection with *B. burgdorferi* (Table 9).

Table 9. Statewide infection rate for adult female *Ixodes scapularis* in 2019.

Pathogen	Disease	% Adult female blacklegged ticks infected
<i>Borrelia burgdorferi</i>	Lyme disease	210 (32.7%)
<i>Borrelia miyamotoi</i>	Tick-borne relapsing fever	12 (1.9%)
<i>Babesia microti</i>	Babesiosis	86 (13.4%)
<i>Anaplasma phagocytophilum</i>	Anaplasmosis	58 (9.0%)
Powassan virus	Encephalitis and meningitis	4 (0.6%)
<i>B. burgdorferi</i> + <i>miyamotoi</i>	Lyme and Tick-borne relapsing fever	5 (0.8%)
<i>B. burgdorferi</i> + <i>microti</i>	Lyme and Babesiosis	51 (7.9%)
<i>B. burgdorferi</i> + <i>Anaplasma</i>	Lyme and Anaplasmosis	27 (4.2%)
<i>B. burgdorferi</i> + <i>Powassan</i>	Lyme and Encephalitis/meningitis	2 (0.3%)
<i>B. burgdorferi</i> / <i>miyamotoi</i> / <i>Babesia</i> / <i>Anaplasma</i> / <i>Powassan</i>	Lyme/TBRF/Babesiosis/Anaplasmosis/Encephalitis	14 (2.2%)

Of the 742 nymphal blacklegged ticks tested, 208 (28.0%) tested positive for any pathogen, and a total of 35 (4.7%) tested positive for two or more pathogens. Overall, a total of 112 (15.1%) ticks screened were positive for infection with *B. burgdorferi* (Table 10).

Table 10: Statewide infection rate for nymphal *Ixodes scapularis* in 2019.

Pathogen	Disease	% Nymphal blacklegged ticks infected
<i>Borrelia burgdorferi</i>	Lyme disease	77 (10.4%)
<i>Borrelia miyamotoi</i>	Tick-borne relapsing fever	12 (1.6%)
<i>Babesia microti</i>	Babesiosis	47 (6.3%)
<i>Anaplasma phagocytophilum</i>	Anaplasmosis	37 (5.0%)
Powassan virus	Encephalitis and meningitis	-----
<i>B. burgdorferi</i> + <i>miyamotoi</i>	Lyme and Tick-borne relapsing fever	2 (0.3%)
<i>B. burgdorferi</i> + <i>microti</i>	Lyme and Babesiosis	21 (2.8%)
<i>B. burgdorferi</i> + <i>Anaplasma</i>	Lyme and Anaplasmosis	8 (1.08%)
<i>B. burgdorferi</i> + Powassan	Lyme and Encephalitis/meningitis	-----
<i>B. burgdorferi/miyamotoi/Babesia/Anaplasma/Powassan</i>	Lyme/TBRF/Babesiosis/Anaplasmosis/Encephalitis	4 (0.54%)

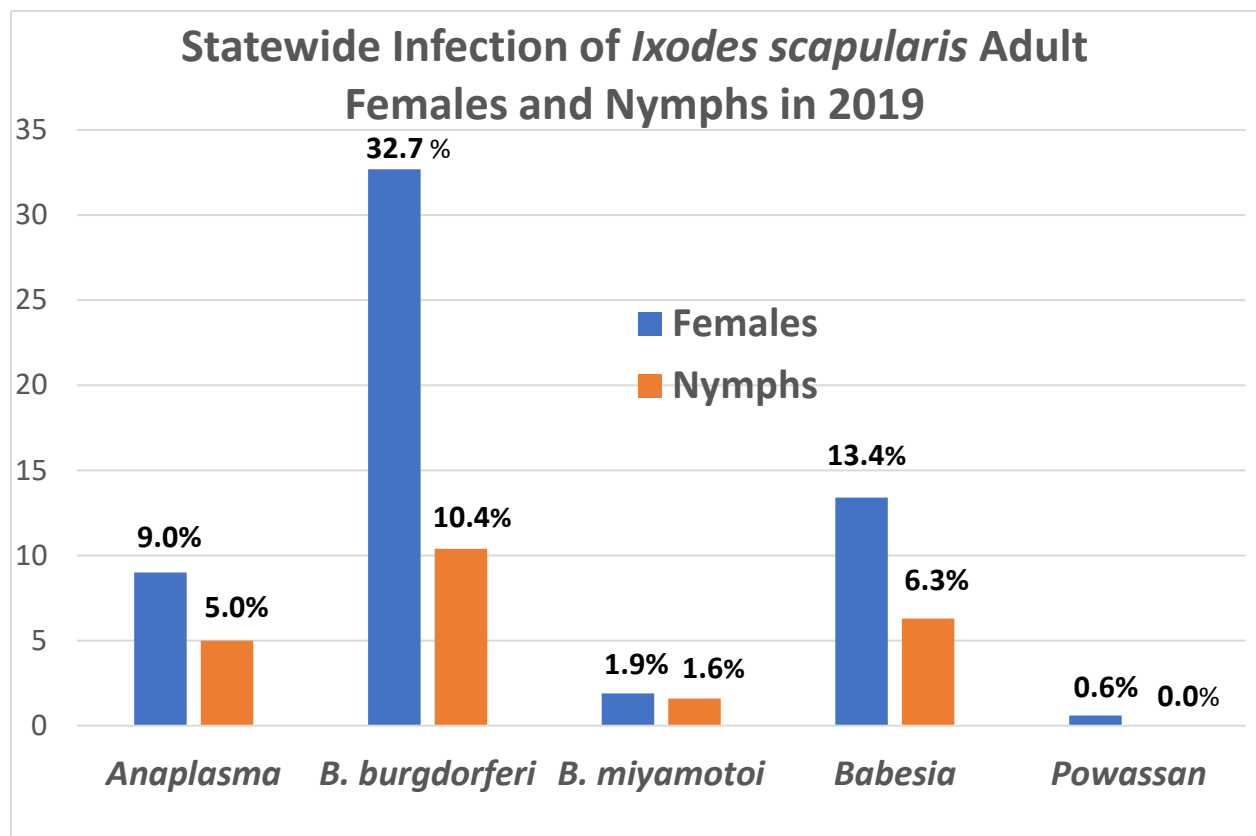


Figure 9: 2019 Statewide Infection Rates for Adult females and Nymphs