SUMMARY OF ACTIVE TICK SURVEILLANCE TESTING RESULTS 2023

A total of 5,221 ticks (adults, nymphs, and larvae) across multiple genera were collected from 40 pre-determined, publicly accessible sites in all 8 counties throughout Connecticut in 2023. Of the more than 5,200 ticks collected, 3,744 (71.7%) were *Ixodes scapularis* (deer or blacklegged tick), 554 (10.6%) were *Dermacentor variabilis* (American dog tick), 370 (7.1%) were *Amblyomma americanum* (lone star tick), 552 (10.6%) 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 2023 sampling year.

Scientific Name	Common Name	Total Number of Ticks Collected (%)
Ixodes scapularis	Deer or blacklegged tick	3,744 (71.7%)
Dermacentor variabilis	American dog tick	554 (10.6%)
Amblyomma americanum	Lone star tick	370 (7.1%)
Haemaphysalis longicornis	Asian longhorned tick	552 (10.6%)
Haemaphysalis leporispalustris	Rabbit tick	1 (0.0%)

A portion of the collected ticks were tested, and of the 699 adult female blacklegged ticks screened for infection, 549 (79%) tested positive for at least one pathogen, and 133 (19.0%) verified positive for two or more pathogens. Overall, more than half of all ticks, 377 (54.0%) tested positive for *B. burgdorferi* (Table 2).

Table 2: Statewide infection rate for adult female *Ixodes scapularis* in 2023.

Pathogen	Disease	% Adult female blacklegged ticks infected
Borrelia burgdorferi (single pathogen)	Lyme disease	244 (35.0%)
Borrelia miyamotoi	Tick-borne relapsing fever	7 (1.0%)
Babesia microti	Babesiosis	98 (14.0%)
Anaplasma phagocytophilum	Anaplasmosis	65 (9.3%)
Powassan virus	Encephalitis and meningitis	2 (0.3%)
B. burgdorferi + miyamotoi	Lyme and Tick-borne relapsing fever	7 (1.0%)
B. burgdorferi + microti	Lyme and Babesiosis	68 (9.7%)
B. burgdorferi + Anaplasma	Lyme and Anaplasmosis	41 (5.9%)
B. burgdorferi + Powassan	Lyme and Encephalitis/meningitis	0 (0.0%)
B.burgdorferi/miyamotoi/Babesia/ Anaplasma/Powassan	Lyme/TBRF/Babesiosis/Anaplasmosis/Encephalitis	17 (2.4%)

Of the 1423 nymphal blacklegged ticks tested, a total of 528 (37.1%) tested positive for at least one pathogen, and a total of 87 (6.1%) tested positive for two or more pathogens. Overall, 278 (19.5%) ticks screened were positive for infection with *B. burgdorferi* (Table 3).

Table 3: Statewide infection rate for nymphal *Ixodes scapularis* in 2023.

Pathogen	**Disease**	**% Nymphal blacklegged ticks infected**
Borrelia burgdorferi (single pathogen)	Lyme disease	191 (13.4%)
Borrelia miyamotoi	Tick-borne relapsing fever	16 (1.1%)
Babesia microti	Babesiosis	153 (10.8%)
Anaplasma phagocytophilum	Anaplasmosis	81 (5.7%)
Powassan virus	Encephalitis and meningitis	0 (0.0%)
B. burgdorferi + miyamotoi	Lyme and Tick-borne relapsing fever	3 (0.2%)
B. burgdorferi + microti	Lyme and Babesiosis	55 (3.9%)
B. burgdorferi + Anaplasma	Lyme and Anaplasmosis	15 (1.1%)
B. burgdorferi + Powassan	Lyme and Encephalitis/meningitis	0 (0.0%)
B.burgdorferi/miyamotoi/Babesia/ Anaplasma/Powassan	Lyme/TBRF/Babesiosis/Anaplasmosis/Encephalitis	14 (1.0%)

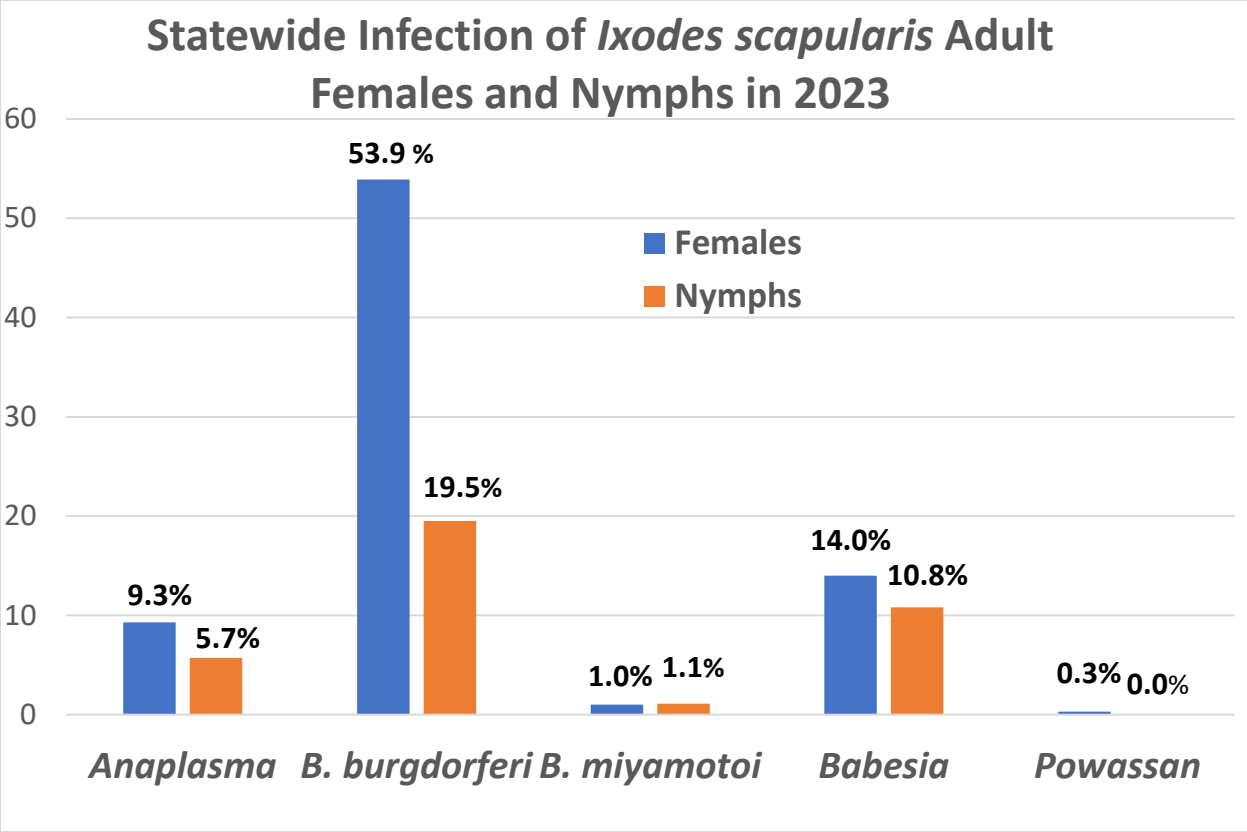

Figure 1: 2023 Statewide Infection Rates for Adult females and Nymphs