Results of Toronto Public Health "Tick Dragging" Tests 2024

Summary prompted by Good Boy Co. (May 2025)

Key Points

- Research suggests 57 blacklegged ticks were tested in Toronto in 2024, with 25 positive for Lyme disease.
- It seems likely that 2 ticks also tested positive for other pathogens, like Babesia or Anaplasma.
- The evidence leans toward Rouge Park having the highest tick count, with 41 ticks, 18 positive for Lyme disease.
- Locations like Cedar Ridge Park and Doris McCarthy Trail also had ticks, but with fewer numbers.

Background

Toronto Public Health (TPH) conducts tick dragging to monitor blacklegged ticks, which can carry Lyme disease, especially in parks. This helps identify risk areas for both humans and pets, like dogs.

2024 Results Summary

In fall 2024, TPH tested 57 ticks, finding 25 positive for Lyme disease bacteria and 2 for other pathogens. Rouge Park stood out with 41 ticks, showing a high concentration, while other parks had fewer ticks.

Implications for Dogs

For dog owners, high-risk areas like Rouge Park mean using tick preventatives and checking pets daily, especially after visits to wooded areas.

Detailed Survey Note

Toronto Public Health (TPH) conducts an annual tick dragging surveillance program to monitor blacklegged tick (*Ixodes scapularis*) populations, the primary vector for Lyme disease in Toronto. This method involves dragging a cloth through vegetation in selected parks during the fall, when adult ticks are most active, to collect and test ticks for pathogens like *Borrelia burgdorferi* (Lyme disease) and others, such as *Babesia*

odocoilei, Anaplasma phagocytophilum, Borrelia miyamotoi, or Powassan virus. The 2024 results, published and updated in spring 2025, provide critical data for assessing tick-related risks, particularly for dogs in Toronto parks. Below is a comprehensive analysis of the findings, their implications, and context.

Overview of 2024 Tick Dragging Results

The 2024 fall tick dragging effort resulted in the collection and testing of **57 blacklegged ticks** across various surveilled locations in Toronto. The laboratory results, conducted at the National Microbiology Laboratory, revealed the following:

- Pathogen Testing: The ticks were tested for six pathogens: Borrelia burgdorferi, Borrelia miyamotoi, Anaplasma phagocytophilum, Babesia odocoilei, Babesia microti, and Powassan virus.
- Lyme Disease Bacteria: 25 ticks tested positive for *Borrelia burgdorferi*, yielding an infection rate of approximately 43.86% (25/57), which is higher than the typical 20-33% estimated for Toronto and indicates significant Lyme disease risk in the sampled areas.
- Other Pathogens: 2 ticks tested positive for additional pathogens, specifically:
 - 4 ticks positive for only Babesia odocoilei.
 - 1 tick positive for Anaplasma phagocytophilum.
 - 2 ticks positive for both Borrelia burgdorferi and Babesia odocoilei.
 - 1 tick positive for both *Borrelia burgdorferi* and *Anaplasma phagocytophilum*.

These results highlight not only Lyme disease risk but also the presence of other tick-borne diseases, which can affect dogs, such as anaplasmosis (*Anaplasma phagocytophilum*) and babesiosis (*Babesia* species).

Location-Specific Findings

The surveillance covered multiple parks, with varying tick counts and infection rates. Below is a detailed breakdown, presented in a table for clarity:

Location	Ticks Found	Positive for Lyme	Other Pathogens Noted
Amberdale Ravine Park	2	0	None
Betty Sutherland Trail Park	0	0	None

Bloordale Park	0	0	None
Bob Hunter Park	3	1	None
Brimley Woods	0	0	None
Brookbanks Park	0	0	None
Cedar Ridge Park	8	2	1 positive for <i>Babesia odocoilei</i> , 1 for both
Cherry Beach – Martin Goodman Trail	1	0	1 positive for <i>Babesia odocoilei</i>
Doris McCarthy Trail	1	1	None
Etienne Brule Park – Humber River	0	0	None
Etobicoke Valley Park – Etobicoke Creek	0	0	None
Lavender Creek Trail	0	0	None
Moore Ravine Park	0	0	None
Northwood Park	0	0	None
Park Drive Reservation Trail	1	0	None
Rennie Park	0	0	None
Rouge National Urban Park: Upper Rouge Trail Park	41	18	2 positive for Babesia odocoilei, 1 for Anaplasma phagocytophilum, 1 for both Borrelia burgdorferi and Babesia odocoilei, 1 for both Borrelia burgdorferi and Anaplasma phagocytophilum
Scarboro Crescent Park	0	0	None

Summerlea Park – Humber River	0	0	None
West Don Parklands	0	0	None

Key Observations:

- Rouge National Urban Park (Upper Rouge Trail Park) was the hotspot, with 41 ticks collected, of which 18 tested positive for Borrelia burgdorferi, representing the highest concentration and infection rate in the survey. This aligns with its known status as a high-risk area, particularly in eastern Toronto, where tick populations are more established.
- Cedar Ridge Park had 8 ticks, with 2 positive for *Borrelia burgdorferi*, 1 for *Babesia odocoilei*, and 1 for both, indicating multiple pathogen risks.
- **Doris McCarthy Trail** had 1 tick, positive for *Borrelia burgdorferi*, reinforcing its status as a risk area from previous years.
- Several locations, such as Betty Sutherland Trail Park and Etobicoke Valley Park, had no ticks found, suggesting lower risk in those areas, though this may reflect sampling bias rather than absence.

Comparison to Previous Years

To provide context, the 2023 results showed **121 ticks tested**, with **43 positive for** *Borrelia burgdorferi* (35.54% infection rate) and **5 positive for other pathogens**. The 2024 decrease to 57 ticks does not necessarily indicate reduced risk, as TPH notes that surveillance locations vary annually. For example, areas like eastern ravines (e.g., Colonel Danforth Trail, a historical hotspot) may not be sampled every year if tick presence is already established, as seen in 2018 when 56 ticks were found there, with 18 positive for Lyme disease.

Methodological Context

Tick dragging is a sampling method, not a comprehensive census, targeting areas with suitable habitats (wooded or brushy areas with tall grasses or leaf litter). The 57 ticks reflect collections from specific sites, not the total tick population. The results are used to update TPH's active tick surveillance map, published in spring (e.g., spring 2025 for 2024 data), and are not predictive but indicative of tick presence and risk. For accessibility, contact publichealth@toronto.ca (mailto:publichealth@toronto.ca) for assistance with the map.

Implications for Dogs

For dog owners, these results are particularly relevant, given dogs' susceptibility to tick bites and tick-borne diseases like Lyme disease, anaplasmosis, and babesiosis. High-risk areas like Rouge Park, Cedar Ridge Park, and Doris McCarthy Trail suggest the need for:

- **Tick Preventatives**: Use vet-recommended products like Bravecto (oral, 12-week protection) or K9 Advantix II (topical, repels ticks), especially in eastern Toronto parks.
- **Daily Checks**: Inspect dogs daily, focusing on ears, neck, armpits, belly, and toes, after park visits to remove ticks before the 24-36 hour attachment period required for Lyme disease transmission.
- Trail Use: Keep dogs on designated trails to avoid brushy areas where ticks are prevalent.

The high infection rate (43.86%) and presence of multiple pathogens underscore the importance of prevention, as dogs can also bring ticks into homes, posing risks to humans.

Limitations and Future Considerations

The variation in tick numbers (57 in 2024 vs. 121 in 2023) reflects sampling differences, not necessarily population changes. Climate change, expanding tick habitats, and mild winters are increasing tick activity in Toronto, potentially raising future risks. Notably, Colonel Danforth Trail, a known hotspot from 2018, was not specifically mentioned in 2024 results, but its historical data (56 ticks, 18 positive) suggests ongoing risk. TPH emphasizes that all of Toronto is an Estimated Risk Area, per Public Health Ontario's Ontario Blacklegged Tick Estimated Risk Areas 2024, with higher concentrations in eastern parks.

Conclusion

The 2024 TPH tick dragging results confirm the presence of blacklegged ticks in Toronto, with 57 tested, 25 positive for Lyme disease, and 2 for other pathogens. Rouge Park, with 41 ticks and 18 positive for *Borrelia burgdorferi*, is a significant hotspot, alongside Cedar Ridge Park and Doris McCarthy Trail. For dog owners, these findings highlight the need for vigilance, especially in eastern parks, using preventatives and daily checks to mitigate tick-related risks.

Key Citations

- Blacklegged Tick Surveillance Results City of Toronto
- Fewer ticks found in Toronto surveillance program CityNews Toronto
- Active Tick Surveillance Map City of Toronto
- Ontario Blacklegged Tick Established Risk Areas 2024 Public Health Ontario

Links

- https://www.toronto.ca/community-people/health-wellness-care/health-programs-advice/lyme-disease/blacklegged-tick-surveillance-results/
- https://www.toronto.ca/wp-content/uploads/2020/01/9496-Active_Surveillance_20 <a href="https://www.toronto.ca/wp-content/uploads/2020/01/9496-Active_200/0