NYC Tick Surveillance Data, 2016*

- Lyme disease is caused by the bacteria *Borrelia burgdorferi*. Infected blacklegged ticks (*Ixodes scapularis*) spread the bacteria when they bite humans and some animals, including dogs.

- Common symptoms of Lyme disease include a *bullseye rash* (erythema migrans), headache, fever, fatigue, swollen lymph nodes, and muscle and joint pain.

- The blacklegged tick is established in two areas of New York City (NYC): It is widespread across Staten Island and is present in a small part of the North Bronx.

- The main *risk factors* for Lyme disease for New Yorkers are travel to an endemic area (an area where blacklegged ticks are widespread) or spending time outdoors in Staten Island.

- Ticks are found in cooler areas where trees, brush, leaf litter and tall grasses provide cover and shade from the sun. Ticks avoid heat and direct sunlight.

- Most people are bitten by ticks during the *spring, summer and fall*, when ticks are most active.

- Lyme disease symptoms usually develop 3 to 30 days after the tick bite.

*Tick surveillance data is only available in the year following collection and testing.*
Patient Characteristics of NYC Lyme Disease Cases, 2017

- There were 1,090 reported cases of Lyme disease among NYC residents in 2017 (Figure 1).
- Cases were reported among residents of all five boroughs, with the majority of cases occurring among Manhattan (35%) and Brooklyn (35%) residents (Figure 2).
- Residents of Manhattan, Brooklyn and Queens were infected while traveling to surrounding states and counties, including the Catskills and Hudson Valley (61%), Pennsylvania (17%), New Jersey (6%) and Long Island (6%).†
- Local transmission of Lyme disease continued to occur in Staten Island and the percentage of locally acquired infections continued to increase (Figure 3).†
- Most cases occurred among residents who identified as male (56%).
- The median age of cases was 38 years old (range 6 months to 91 years).
- The majority of cases identified as White, non-Hispanic (77%).

Tick-borne Disease Prevention
When spending time in areas where ticks may be found, follow these tips:

<table>
<thead>
<tr>
<th>Before You Go Outdoors</th>
<th>After You Go Indoors</th>
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<tbody>
<tr>
<td>- Use insect repellent with DEET, picaridin, IR3535 or oil of lemon eucalyptus extract (also known as PMD).</td>
<td>- Check your clothing for ticks and remove any that are found.</td>
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<td>- Treat clothing and gear with products containing 0.5% permethrin.</td>
<td>- Tumble-dry clothes in a dryer on high heat for 10 minutes to kill ticks on dry clothing.</td>
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<td>- Wear long pants and closed-toe shoes, and tuck pant legs into your socks.</td>
<td>- Shower soon after being outdoors.</td>
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<tr>
<td>- Avoid wooded and brushy areas with high grass and leaf litter and walk in the center of trails.</td>
<td>- Check yourself, children and pets for ticks.</td>
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Talk to your veterinarian about the best tick prevention products for your pet.

For more information about ticks, including how to safely remove them, visit nyc.gov/health/ticks.