How can tick-borne diseases be prevented?

- Perform tick checks:
  1. Remove ticks from your clothes before going indoors.
  2. Wash your clothes with hot water and dry them using high heat for at least one hour.
  3. Perform a daily tick check after being outdoors. Inspect all parts of your body, including your armpits, scalp, and groin.

- Safely remove any found ticks:
  1. Use fine-tipped tweezers.
  2. Grab the tick close to the skin. Do not twist or jerk the tick, as this may cause the mouthparts to break off and remain in the skin.
  3. With a steady motion, gently pull straight up until all parts of the tick are removed.
  4. After removing the tick, clean your skin with soap and warm water.
  5. Contact your healthcare provider if you develop any symptoms.

- Do not use petroleum jelly, hot matches, nail polish remover or other products to remove a tick.

Where can I find more information about tick-borne disease?

NJDOH Communicable Disease Service
http://www.nj.gov/health/cd/

CDC Tick-Borne Diseases
http://www.cdc.gov/ticks/diseases/

CDC Updates on Mosquito Repellent
http://www.cdc.gov/ncidod/dvbid/westnile/RepellentUpdates.htm

New Jersey Department of Health Communicable Disease Service
PO Box 369
Trenton, NJ 08625
Phone: 609-826-4872
What are tick-borne diseases?

Tick-borne diseases are bacterial illnesses that spread to humans through infected ticks. The most common tick-borne diseases in New Jersey are:

- Lyme disease
- Ehrlichiosis
- Anaplasmosis
- Rocky Mt. spotted fever
- Babesiosis

How do tick-borne diseases spread?

Tick-borne diseases are not spread between two people, but rather rely on ticks for transmission. Ticks become infected by micro-organisms (bacteria or protozoan parasites) when feeding on small infected mammals (e.g. mice and voles). Different tick-borne diseases are caused by different micro-organisms and it is possible to be infected with more than one tick-borne disease at the same time.

These are the ticks in New Jersey that may carry disease causing micro-organisms:

- Black-legged “deer” tick (*Ixodes scapularis*)
- Lone star tick (*Amblyomma americanum*)
- American dog tick (*Dermacentor variabilis*)

Who gets tick-borne diseases?

Anyone who is bitten by an infected tick may get a tick-borne disease. People who spend a lot of time outdoors have a greater risk of becoming infected.

What are the symptoms of tick-borne diseases?

The early signs of tick-borne diseases generally include:

- Skin rash
- General tiredness
- Fever and/or chills
- Headache
- Stiff neck
- Muscle aches
- Joint pain
- Dizziness

How soon after a tick bite do symptoms occur?

<table>
<thead>
<tr>
<th>Disease</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lyme disease</td>
<td>3-30</td>
</tr>
<tr>
<td>Ehrlichiosis</td>
<td>5-10</td>
</tr>
<tr>
<td>Anaplasmosis</td>
<td>5-21</td>
</tr>
<tr>
<td>Rocky Mt. spotted fever</td>
<td>5-10</td>
</tr>
<tr>
<td>Babesiosis</td>
<td>7-56</td>
</tr>
</tbody>
</table>

How are tick-borne diseases diagnosed?

Most tick-borne diseases are diagnosed through blood tests and by discussing symptoms with a healthcare provider.

What is the treatment for tick-borne diseases?

Tick-borne diseases caused by bacteria (Lyme disease, ehrlichiosis, anaplasmosis, and Rocky Mt. spotted fever) can be treated with antibiotics. Babesiosis is caused by a parasite similar to malaria, and is treated with anti-protozoal drugs. It is important to watch for symptoms and talk to your healthcare provider if you’ve been bitten by a tick. Early treatment can be very effective.

How can tick-borne diseases be prevented?

- Avoid wooded areas with dense shrubs, high grass, and a lot of leaves, as these are places where ticks are likely to hide.
- If you hike in the woods, stay to the center of the trail to avoid overgrown vegetation.
- Take extra precautions in May, June, and July when ticks that transmit disease are most active.
- Make your yard less attractive to ticks: mow lawns, clear brush, and remove leaf litter.
- Keep ground under bird feeders clean.
- Keep playground equipment, decks, and patios away from yard edges and trees.
- When outdoors, apply EPA-registered insect repellent on exposed skin and clothing according to the instructions on the product label. DEET may be used on skin and Permethrin should only be used on clothing and outdoor gear.
- Cover up. Wear long, solid, and light-colored clothing with pants tucked into socks. This will help prevent ticks from getting under your clothes and attaching to your skin.