Tick and Mosquito Repellents

Higher concentration corresponds to how long you are protected, not how well you are protected.

**DEET (N, N-diethyl-m-toluamide)**
- Safe and effective for children ≥ 2 months
- 10-30% concentration effective for 3 to 5 hours

**Picaridin**
- Safe and effective for children ≥ 2 months
- 10% concentration effective for 2 to 3 hours
- Similar to a natural compound found in black pepper plants

**Oil of Lemon Eucalyptus**
- Safe and effective for children ≥ 3 years
- 30% concentration effective for 4 hours
- Sourced from the gum eucalyptus tree

**Permethrin 0.5%**
- Applied to clothing and gear - do NOT apply to skin
- Safe and effective for toddlers, children and teens
- Effective for multiple washes

**Additional Strategies**
- Avoid tall grass and brushy areas when possible
- Ticks don’t fly or jump, they wait for a host to brush up against them
- Mow yards regularly, keep tall grasses and bushes away from busy yard areas
- Check your child’s body, and your own, for ticks after being outdoors
- Tumble dry clothes on high heat for 10 minutes to kill ticks on clothing. If the clothes require washing first, hot water is recommended.
- Shower soon after spending time outdoors to help wash off unattached ticks
- Examine gear such as clothing, boots, bags and tents after being outdoors
- Outdoor/indoor pets should be checked for ticks as well, even if they are on a tick medication or have been vaccinated to protect against Lyme disease. Talk to your veterinarian about tick prevention products for your dog.

**Tick Removal**

Use slow, steady upward pressure to remove tick from skin. Dispose of tick by flushing down the toilet or placing in alcohol or a sealed bag.
**Lyme Disease**

### Post-exposure Prophylaxis
A single dose of doxycycline is available for children of all ages when the following criteria are met/suspected:
- Tick was removed within the last 72 hours
- Tick was swollen or suspected to be attached for >24-36 hours
- The bite occurred in an area where Lyme disease is common
- Tick is suspected to be a deer tick (blacklegged tick)

### Early Lyme Disease Treatment (check one)

<table>
<thead>
<tr>
<th>Medication</th>
<th>HCP Rx Info</th>
<th>Dose</th>
<th>AM</th>
<th>Mid-day</th>
<th>PM</th>
<th># Days</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doxycycline</td>
<td>(4.4mg/kg/day div BID) Max 100mg/dose</td>
<td>____ mg</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>10 Days</td>
<td>Take with full glass of water</td>
</tr>
<tr>
<td>Amoxicillin</td>
<td>(50mg/kg/day div TID) Max 500mg/dose</td>
<td>____ mg</td>
<td>X</td>
<td></td>
<td>X</td>
<td>14 Days</td>
<td></td>
</tr>
<tr>
<td>Cefuroxime axetil</td>
<td>(30mg/kg/day div BID) Max 500mg/dose</td>
<td>____ mg</td>
<td>X</td>
<td></td>
<td>X</td>
<td>14 Days</td>
<td></td>
</tr>
</tbody>
</table>

### Signs & Symptoms to Watch For
Monitor for these symptoms of Lyme disease that can occur three to 30 days after a tick bite:
- Fever
- Chills
- Headache
- Fatigue
- Muscle/joint aches
- Swollen lymph nodes
- Erythema migrans (EM) - a flat or slightly raised red, circular rash, typically larger than 5 centimeters. Expands gradually over several days and may appear like a target or bull's-eye.

### Diagnosis of Early Lyme Disease
Early infection with classic erythema migrans rash in Lyme disease endemic areas is a clinical diagnosis (i.e. laboratory testing not required). In all other cases, diagnosis of Lyme disease should be supported by laboratory testing.

### Completed by provider, if necessary

*This is not a prescription.*

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Common side effects to watch for:
- Sun sensitivity
- Upset stomach/diarrhea
- Rash (call your healthcare provider)
- Other __________________________

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