

Tick-Borne Illness Prevention

What Are Tick-Borne Illnesses?

Ticks are small bugs that can carry germs that cause diseases in people. Some of the most common tick-borne illnesses in the United States include Lyme disease, Rocky Mountain spotted fever, anaplasmosis, ehrlichiosis, and babesiosis. These diseases can cause symptoms like fever, rash, tiredness, and muscle aches. In some cases, they can be serious if not treated early.[\[1\]](#)

How Do People Get Tick-Borne Illnesses?

Most tick-borne illnesses are spread when a tick bites and stays attached to the skin for several hours or days. The risk of getting sick increases the longer a tick is attached, especially if it is attached for more than 24–48 hours.[\[2\]\[3\]](#)

How Can Tick-Borne Illnesses Be Prevented?

The best way to prevent tick-borne illnesses is to avoid tick bites. Here are the most important steps:

- **Avoid Tick Habitats:** Ticks are often found in wooded, brushy, or grassy areas. Try to avoid these places, especially during the warmer months when ticks are most active.[\[2\]\[4\]](#)
- **Wear Protective Clothing:** When spending time outdoors, wear long sleeves, long pants, and closed-toe shoes. Tuck your pants into your socks and your shirt into your pants to keep ticks from crawling under your clothes. Light-colored clothing makes it easier to spot ticks.[\[2\]\[4\]\[5\]](#)
- **Use Tick Repellents:** Use an Environmental Protection Agency (EPA)-approved tick repellent on exposed skin and clothing. Effective ingredients include DEET, picaridin, IR3535, oil of lemon eucalyptus (OLE), p-methane-3,8-diol (PMD), and 2-undecanone. Permethrin can be used on clothing and gear, but not directly on skin.[\[2\]\[4\]\[5\]\[6\]](#)
- **Check for Ticks:** After being outdoors, carefully check your entire body for ticks. Pay special attention to hidden areas like the scalp, behind the ears, under the arms, around the waist, and behind the knees. Check children and pets, too.[\[2\]\[4\]\[7\]](#)
- **Shower Soon After Being Outdoors:** Bathe or shower within two hours of coming indoors to help remove ticks before they attach.[\[2\]\[5\]\[7\]](#)
- **Handle Clothing Properly:** Put your clothes in a dryer on high heat for at least 10 minutes (or wash in hot water) to kill any ticks that may be on them.[\[2\]\[5\]\[7\]](#)

What Should Be Done If a Tick Is Found?

- **Remove the Tick Promptly:** Use clean, fine-tipped tweezers to grasp the tick as close to the skin as possible. Pull upward with steady, even pressure. Do not twist, burn, or use chemicals to remove the tick.[\[2\]](#)[\[5\]](#)[\[6\]](#)
- **Clean the Area:** After removing the tick, clean the bite area and your hands with soap and water or hand sanitizer.[\[2\]](#)[\[6\]](#)
- **Save the Tick (Optional):** You may save the tick in a sealed container or bag, labeled with the date and location, in case your healthcare provider wants to see it. However, testing ticks for germs is not recommended.[\[1\]](#)[\[2\]](#)[\[5\]](#)
- **Watch for Symptoms:** Monitor your health for several weeks. If you develop a rash, fever, headache, or feel unwell, contact your healthcare provider and mention your recent tick bite.[\[1\]](#)[\[2\]](#)[\[5\]](#)

When Is Preventive Antibiotic Treatment Needed?

Most tick bites do not lead to illness and do not require antibiotics. However, a single dose of doxycycline may be recommended for adults and children if ALL of the following are true:[\[2\]](#)[\[3\]](#)[\[5\]](#)[\[7\]](#)

- The tick is identified as a blacklegged (deer) tick (*Ixodes* species).
- The bite occurred in an area where Lyme disease is common.
- The tick was attached for 36 hours or more.
- The antibiotic can be started within 72 hours of removing the tick.
- There are no reasons you cannot take doxycycline.

The recommended dose is a single 200 mg dose for adults, or 4.4 mg/kg (up to 200 mg) for children.[\[2\]](#) If these criteria are not met, watch for symptoms instead of taking antibiotics.

Other Tips

- There is currently no vaccine available for Lyme disease or other common tick-borne illnesses in the United States.[\[2\]](#)[\[7\]](#)
- Modifying your yard or spraying pesticides may reduce tick numbers but has not clearly been shown to lower the risk of disease.[\[7\]](#)
- Early removal of ticks is one of the most important ways to prevent illness.[\[2\]](#)[\[3\]](#)

Summary



- Avoid tick habitats when possible.
- Use protective clothing and tick repellents.
- Check for ticks after outdoor activities.
- Remove ticks promptly and safely.
- Watch for symptoms and seek medical care if needed.

Staying aware and taking these steps can help prevent tick-borne illnesses and keep you and your family healthy.[\[1\]\[2\]\[4\]\[5\]\[6\]\[7\]](#)

References

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