Protect Yourself from Ticks Where You Work

If your job involves working outdoors in grassy, brushy areas, or in oak, pine, or redwood forests, you may be at risk for tick bites and the diseases ticks can carry. Ticks usually live in shaded areas with grass, shrubs, rocks, logs, and fallen leaves. When a person spends time in these areas, they are more likely to be bitten by a tick. When a tick bites, it can spread germs that can make people sick. In California, common ticks include the western blacklegged tick (which can transmit Lyme disease), the Pacific Coast tick, and the American dog tick.

Diseases spread by ticks can make some people very sick. It is important that you and your coworkers know how to prevent tick bites while working outdoors and know what to do if you are bitten by a tick.

Who is at risk for being bitten by a tick?

People who work outdoors in grassy, brushy areas where ticks live are more likely to be bitten by a tick. This can include people who work in certain jobs including:

- Brush clearing
- Construction
- Farming
- Field work research
- Forestry
- Land surveying
- Military activities and training
- Outdoor photography
- Park or wildlife management
- Trail construction/management
- Utility line work
- Wildland firefighting

Worksites in forested areas or areas with high grass, dense brush, and leaf litter are likely to have ticks. Ticks can also be found on wood products in campgrounds and parks. You should be aware of ticks when sitting or resting on logs, picnic benches, and even rocks.

Tick season. If you work outdoors in California, you may come across a tick at any time of the year. However, you are less likely to encounter a tick during the hot and dry summer months.

Types of tick-borne diseases. Ticks may carry bacteria, viruses, or parasites and pass them to humans and other animals when they bite. Lyme disease is the most commonly reported tick-borne disease in California. Other tick-borne diseases in California include: tick-borne relapsing fever, babesiosis, Rocky Mountain spotted fever, Pacific Coast tick fever, anaplasmosis, and tularemia.
The best way to protect yourself from tick-borne diseases is to protect yourself from tick bites.

Before you begin work outdoors in areas with ticks:

- **Dress for protection.** Wear a long-sleeved shirt and long pants, and tuck in your shirt. Since ticks are usually darker in color, wearing light-colored clothes can help you more easily spot ticks that may be crawling on your clothes.

- **Apply repellent.** Use an EPA-registered insect repellent containing 20-30% DEET or picaridin on clothes and exposed skin, especially on your feet, ankles, and legs. Repellents keep ticks, mosquitoes, and other insects from biting you.
  - You can also treat clothing and gear with 0.5% permethrin, which will kill or repel ticks. When using permethrin, be sure to follow the label instructions carefully. Apply permethrin to clothing and gear before putting them on. Do not spray permethrin on your skin.

While you are working:

- **Check for ticks.** Check yourself and others for ticks regularly while you are working. If you find a tick crawling on your clothes or skin, brush it off.

  **What to look for:** Ticks have a flat, teardrop-shaped body and are usually brown, reddish, or black, and may have gray or white markings. Ticks can be tiny – they can range in size from slightly larger than a sesame seed to the size of a poppy seed.

After you return from work:

- **Check for ticks again.** Check your whole body for ticks, including behind the knees, under the arms, and in the hairline and groin areas. Keep checking for ticks 3 days after being outside in areas with ticks to be sure you don’t miss any ticks that may be hiding in hard-to-reach areas.

- **Shower.** Take a shower within two hours after you return indoors. Shower and scrub your head and body to wash away any ticks that you may have missed.

- **Dry your clothes.** Before washing work clothes, put them in a hot dryer for 10 minutes to kill any ticks that may be on your clothes.

For more pictures of common ticks in California, see the [CDPH Common Ticks in CA wallet card](https://www.cdph.ca.gov/programs/diseases/Topical/Ticks/Pages/default.aspx).
What if I find a tick attached to my skin?
If you find a tick attached to your skin:

1. **Remove the tick with tweezers as soon as possible** (see steps below).
   Timing is very important! Remember that ticks can spread diseases to people when they bite. Depending on the type of disease, it can take hours to days for an infected tick to transmit a disease to a person when it bites. The sooner you remove a tick that is attached, the lower your risk of getting sick.

2. Tell your supervisor or safety officer that you were bitten by a tick. Note the date you were bitten and where you were working outside before you were bitten or found the tick.

How to remove a tick. The best way to remove a tick is to pull it out using tweezers:

- Use tweezers to grab the tick as close to your skin as possible.
- Slowly pull the tick firmly, straight out, and away from your skin. Do not twist or jerk the tick while pulling.
  - Sometimes during removal, part of the tick may break off and stay in the skin. If this happens, remove any remaining parts with tweezers like you would a splinter. If you cannot completely remove the tick, clean the area, apply antibiotic ointment, and see a healthcare provider if the area becomes infected.

- Wash your hands and the bite area with soap and water, or apply an antiseptic to the bite area.
- Throw the tick away in the trash, flush it down the toilet, or save it for identification by a public health agency by placing it in rubbing alcohol or taping it to a piece of paper using clear tape.

Some specially designed tick-removal devices can also work well to remove ticks. These devices usually have a slanted edge to make it easier to grasp a tick that is attached. These devices may be easier to use than tweezers. When using these devices, it’s still important to slowly pull the tick up and out, without twisting.

Tick removal techniques that **don’t** work, such as applying nail polish, burning the tick with a match, or swabbing it with soap, should **not** be used because they delay removal and can also be dangerous. **If you find a tick attached to your skin, it’s important to carefully remove it as soon as possible.**
Symptoms of a tick-borne disease.

If you were bitten by a tick, it’s important to watch for symptoms that may appear up to 30 days after being bitten.

Important: Some people may have a red, painful reaction at the tick bite site within 24 hours after being bitten by a tick. This is a reaction to the tick’s saliva and usually goes away in a few days. This reaction does not mean you have been infected with a disease.

The symptoms of a tick-borne disease may include:

- Body/muscle aches
- Fever
- Headache
- Fatigue
- Joint pain
- Rash
  - For Lyme disease, the rash is a spreading, painless red area that sometimes looks like a “bullseye”.
  - For Rocky Mountain spotted fever, the rash is a red, spotted area beginning on the wrist and ankles that spreads in both directions to the palms of the hands and soles of the feet, or up the legs or up to the torso.
- Stiff neck
- Facial paralysis

If you develop any of these symptoms within 30 days of a tick bite, tell your employer and seek medical care right away. Be sure to tell your healthcare provider that you work outdoors in an area where ticks may be present. Most tick-borne diseases can be successfully treated with certain antibiotics, especially if treatment is started early.

Where can I get more information?

Talk with your employer if you are concerned about ticks in your workplace.

For more information about tick-borne diseases in California, visit the CDPH Tick-Borne Diseases Website (https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Tick-Borne-Diseases.aspx)

For information on repellents, visit the CDPH Insect Repellent webpages: (https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Dont-Give-Bugs-a-Biting-Chance.aspx) or the National Pesticide Information Center Repellent webpages (http://npic.orst.edu/ingred/ptype/repel.html).

For information on workplace hazards, call the CDPH Occupational Health Branch Workplace Hazard Helpline at: (866) 282-5516.

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