# NATURAL RESOURCES VOLUNTEER HANDBOOK



## **POISON IVY**

## "Leaves of three, let it be!"

Poison ivy is a native plant, but it's regulated by the state of Minnesota as a noxious weed because the plant produces oils that can cause severe itching, rash or blisters. This reaction may occur when the oil directly contacts the skin, or when the oil is transferred to skin from clothing, pet fur or tools.

### Learn to identify and avoid poison ivy

This woody plant can be found in grassy fields and forests, or along woodland edges, trails and disturbed areas. It typically grows three to 15 inches in height, but occasionally reaches three feet. As the rhyme indicates, there are three leaflets on each compound leaf—but several other native species share this characteristic.

- Blackberry and raspberry have three leaflets with saw-toothed leaf margins, compared to the large teeth on poison ivy.
- Boxelder also has three leaflets with large teeth—but it's free-standing. Poison ivy can only grow a few feet tall without support, so it tends to be trailing or vinelike.

The number of leaflets also makes it easy to distinguish poison ivy from woodbine (Virginia creeper): Woodbine has five leaflets rather than three.



Poison ivy (left) vs. woodbine (right)

#### Prevention is the best cure

Wear protective clothing (long pants, long-sleeved shirts, closed-toed shoes and gloves) in risky areas, and wash exposed clothing separately.

If you are (or may have been) exposed to poison ivy, wash with soap and cold water as soon as possible. Consult a physician for treatment if serious allergy symptoms develop, or if itching lasts more than about 10 days.

## When to report

Natural Resources staff will respond to complaints of poison ivy in places where people are likely to come in contact, including:

- Along trails, public accesses, sidewalks or rights-of-way
- In maintained areas of parks
- On business properties that are open to the public
- Along private property boundaries, when requested by adjacent property owners.

Contact Janet Van Sloun at 952-988-8423 to report poison ivy in any of these locations.



#### First aid

## Insect bites and stings: First aid

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By Mayo Clinic Staff

Most insect bites and stings are mild and can be treated at home. They might cause itching, swelling and stinging that go away in a day or two. Some bites or stings can transmit disease-causing bacteria, viruses or parasites. Stings from bees, yellow jackets, wasps, hornets and fire ants might cause a severe allergic reaction (anaphylaxis).

#### For mild reactions

To treat a mild reaction to an insect bite or sting:

- Move to a safe area to avoid more bites or stings.
- Remove any stingers.
- · Gently wash the area with soap and water.
- Apply a cloth dampened with cold water or filled with ice to the area of the bite or sting for 10 to 20 minutes. This helps reduce pain and swelling.
- If the injury is on an arm or leg, raise it.
- Apply to the affected area calamine lotion, baking soda paste, or 0.5% or 1% hydrocortisone cream. Do this several times a day until your symptoms go away.
- Take an anti-itch medicine (antihistamine) by mouth to reduce itching. Options include nonprescription cetirizine, fexofenadine (Allegra Allergy, Children's Allegra Allergy), loratadine (Claritin).
- Take a nonprescription pain reliever as needed.

Seek medical care if the swelling gets worse, the site shows signs of infection or you don't feel well.

## When to seek emergency care

Call 911 or your local medical emergency number if a child is stung by a scorpion or if

1 of 3 2022-06-17, 8:08 AM

anyone is having a serious reaction that suggests anaphylaxis, even if it's just one or two signs or symptoms:

- Trouble breathing
- Swelling of the lips, face, eyelids or throat
- Dizziness, fainting or unconsciousness
- A weak and rapid pulse
- Hives
- Nausea, vomiting or diarrhea

Take these actions immediately while waiting for medical help:

- Ask whether the injured person is carrying an epinephrine autoinjector (EpiPen, Auvi-Q, others). Ask whether you should help inject the medication. This is usually done by pressing the autoinjector against the thigh and holding it in place for several seconds.
- Loosen tight clothing and cover the person with a blanket.
- Don't offer anything to drink.
- If needed, position the person to prevent choking on vomit.

#### **Show References**

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March 18, 2022

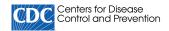
Original article: https://www.mayoclinic.org/first-aid/first-aid-insect-bites/basics/art-20056593

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https://www.cdc.gov/ncezid/dvbd/about/prevent-bites.html



## **Prevent Tick and Mosquito Bites**

Protect yourself and your family from tick and mosquito bites Use insect repellent



Use Environmental Protection Agency (EPA)-registered insect repellents with one of the active ingredients below. When used as directed, EPA-registered insect repellents are proven safe and effective, even for pregnant and breastfeeding women.

- DEET
- Picaridin (known as KBR 3023 and icaridin outside the US)
- IR3535
- Oil of lemon eucalyptus (OLE)
- Para-menthane-diol (PMD)
- 2-undecanone

Find the insect repellent that's right for you by using EPA's search tool 🖸 .

#### Tips for everyone

- Always follow the product label instructions.
- Reapply insect repellent as directed.
  - Do not spray repellent on the skin under clothing.
    - o If you are also using sunscreen, apply sunscreen first and insect repellent second.



#### Tips for babies & children

- Dress your child in clothing that covers arms and legs.
- · Cover strollers and baby carriers with mosquito netting.
- When using insect repellent on your child:
  - o Always follow label instructions.
  - Do not use products containing oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD) on children under 3 years old.
  - o Do not apply insect repellent to a child's hands, eyes, mouth, cuts, or irritated skin.
    - Adults: Spray insect repellent onto your hands and then apply to a child's face.

Natural insect repellents (repellents not registered with EPA)

1 of 2 2022-06-17, 8:04 AM

- We do not know the effectiveness of non-EPA registered insect repellents, including some natural repellents.
- To protect yourself against diseases spread by mosquitoes, CDC and EPA recommend using an EPA-registered insect repellent.
- Choosing an EPA-registered repellent ensures the EPA has evaluated the product for effectiveness.
- Visit the EPA website to learn more

## Wear long-sleeved shirts and long pants

- Treat items, such as boots, pants, socks, and tents, with 0.5% permethrin or buy permethrin-treated clothing and gear.
  - Permethrin-treated clothing will protect you after multiple washings. See product information to find out how long the protection will last.
  - o If treating items yourself, follow the product instructions.
  - Do not use permethrin products directly on skin.

### More information on ticks

- Learn how to prevent tick bites on people, on pets, and in the yard.
- Learn how to remove ticks.

## More information on mosquitoes

- Learn how to control mosquitoes at home.
- Learn how local governments and mosquito control programs use an integrated mosquito management approach to control mosquitoes.

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2 of 2 2022-06-17, 8:04 AM



## Lyme disease

## What is Lyme disease?

Lyme disease is one of many tickborne diseases in Minnesota. It is the most common tickborne disease in Minnesota and the United States. The disease can cause a variety of symptoms that affect many different parts of the body. It is called Lyme disease because it was discovered in the Lyme, Connecticut area in 1975.

## How do people get Lyme disease?

People can get Lyme disease through the bite of a blacklegged tick (deer tick) that is infected with *Borrelia burgdorferi* bacteria. Not all blacklegged ticks carry these bacteria and not all people bitten by a blacklegged tick will get sick. The tick must be attached to a person for at least 24-48 hours before it can spread Lyme disease bacteria.

Blacklegged ticks live on the ground in areas that are wooded or have lots of brush. The ticks search for hosts at or near ground level and grab onto a person or animal as they walk by. Ticks do not jump, fly, or fall from trees.

In Minnesota, the months of April through July and September through October are the greatest risk for being bitten by a blacklegged tick. Risk peaks in June or July every year. Blacklegged ticks are small; adults are about the size of a sesame seed and nymphs (young ticks) are about the size of a poppy seed. Due to their small size, a person may not know they have been bitten by a tick.

# What are the symptoms of Lyme disease?

Early symptoms of Lyme disease usually appear within 30 days of a tick bite. It is common to have a red and sometimes itchy spot, up to the size of a quarter, right after being bitten by a tick. This is due to irritation from the tick's saliva and is not a symptom of Lyme disease. However, contact your doctor if you notice any of the following symptoms:

#### Rash

- May look like a bull's-eye, or a red ring with a clear center that may grow to several inches in width
- May not be itchy or painful
- Not everyone gets or sees a rash and not all rashes look like a bull's-eye
- Fever or chills
- Muscle or joint pain
- Headache
- Tiredness or weakness

If a person is not treated early, one or more of the following symptoms may occur weeks or months later: multiple rashes, paralysis on one side of the face, weakness or numbness in the arms or legs, irregular heartbeat, or swelling in one or more joints.

# How is Lyme disease diagnosed?

If a person suspects Lyme disease, they should contact a doctor as soon as possible for diagnosis and treatment. The diagnosis of Lyme disease is based on a history of exposure to tick habitat and a physical examination to assess for any rash or other symptoms. Laboratory tests may be performed to confirm the diagnosis.

## How is Lyme disease treated?

Lyme disease is treated with antibiotics.

Treatment works best early in the disease.

Lyme disease detected later is also treatable with antibiotics but symptoms may take longer to go away, even after the antibiotics have killed the Lyme disease bacteria. In most cases, symptoms go away after treatment. It is possible to get Lyme disease more than once so continue to protect yourself from tick bites and contact your doctor if you suspect you may have symptoms of Lyme disease.

## How can I reduce my risk?

There is currently no human vaccine available for Lyme disease. Reducing exposure to ticks is the best defense against tickborne diseases.

#### Protect yourself from tick bites:

- Know where ticks live and when they are active.
  - Blacklegged ticks live in wooded or brushy areas.
  - In Minnesota, blacklegged tick activity is greatest from April – July and September – October.
- Use a safe and effective tick repellent if you spend time in or near areas where ticks live. Follow the product label and reapply as directed.
  - Use **DEET**-based repellents (up to 30%) on skin or clothing. Do not use DEET on infants under two months of age.
  - Pre-treat clothing and gear with permethrin-based repellents to protect against tick bites for at least two weeks without reapplication. Do not apply permethrin to your skin.
- Wear light-colored clothing to help you spot ticks more easily. Wear long-sleeved shirts and pants to cover exposed skin.

- Tumble dry clothing and gear on high heat for at least 60 minutes after spending time in areas where ticks live.
- Talk with your veterinarian about safe and effective products you can use to protect your pet.

## Check for ticks at least once a day after spending time in areas where ticks live:

- Inspect your entire body closely with a mirror, especially hard-to-see areas such as the groin and armpits.
- Remove ticks as soon as you find one.
- Use tweezers or your fingers to grasp the tick close to its mouth. Pull the tick outward slowly and gently. Clean the area with soap and water.
- Examine your gear and pets for ticks.

#### Manage areas where ticks live:

- Mow lawns and trails frequently.
- Remove leaves and brush.
- Create a barrier of wood chips or rocks between mowed lawns and woods.

Minnesota Department of Health Vectorborne Diseases Unit PO Box 64975 St. Paul, MN 55164 651-201-5414 www.health.state.mn.us

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https://hgic.clemson.edu/

## **CHIGGERS**

Factsheet | HGIC 2476 | Published: Nov 1, 1998

Chiggers are not insects. They are actually a larval, or immature, mite. Chiggers are commonly known as red bugs because of their bright color. They may be orange, yellow, or straw colored. They are most known for the severe itching they can cause. Only the larval form of the mite bites humans.

## Life Cycle

Adult female mites lay from one to five eggs per day in leaf litter, damp soil or overgrown weeds. After five to seven days, the chiggers hatch. They crawl over vegetation until they find a shaded area near the top of an object that is close to the ground, like a fallen leaf or a



Chigger mites ©Susan Ellis, Bugwood.org

blade of grass. Chiggers then wait for a suitable host. They are attracted to the carbon dioxide exhaled by the host. Once on a host, chiggers usually crawl around on the body before settling down. On animals, chiggers are likely to attach themselves in areas without fur. On humans, chiggers tend to accumulate in areas where clothing is tight, such as a belt at the waist or socks around the ankle. The larvae pierce skin around hair follicles and release a skin dissolving saliva. Chiggers then feed on the resulting liquid. Contrary to popular belief, chiggers do not burrow into the skin nor do they feed on blood. The larva usually stays attached for about three days, but may remain longer. After it feeds, the larva will drop to the ground and bury itself. The larval form is quite small, only 1/128 inch, and has six legs.

After a week or ten days, the larvae molt into a nymph with eight legs. Nymphs are not a pest to humans. Instead they feed on the eggs and young of other small soil animals. After two weeks to one month, nymphs molt into an adult that also has eight legs, but is larger. Like the nymph, the adult is not a pest to humans.

In total, the life cycle of the chigger usually takes from 40-75 days, but can take up to ten months, depending on the environment.

## Medical Importance and Treatment

Chigger feeding causes an intense itch that can last for several days or weeks. The itching is not felt until three or more hours after feeding occurs. If you have been attacked by chiggers, there are several ways to remove them. One of these is to take a bath as soon as possible. Apply a thick lather of soap to the infected area, rinse, and repeat. This will kill most of the chiggers on you. Next, apply an antiseptic to the welts. This will kill remaining chiggers. Ask your pharmacist about products that may relieve

1 of 2 2022-06-17, 7:59 AM

the itching. Scratching may remove chiggers, but may result in mouthparts remaining at the feeding site. The mouthparts and the scratching can cause secondary infections that may require topical antibiotic treatment. Chiggers found in the United States are not known to transmit any diseases to humans, although, some species in the Orient and other countries in the Pacific do carry a disease called scrub typhus.

### Prevention and Control

Prevention is the best way to avoid chigger bites. Spray exposed skin with an insect repellent. Read the repellent label carefully before applying to sensitive skin. Pay special attention to spots where chiggers can crawl onto the skin from clothing such as around socks, waistbands, cuffs and collars. Consider spraying clothing that will contact vegetation. Several products are available for application to cloth. Check the label for the appropriate application. Wearing long-pants tucked into boots or socks and long-sleeved, tight, cuffed shirts will add to your protection. Also be aware that chiggers can infest inanimate objects that touch the ground, like blankets or clothes.

If chiggers are a problem around the outside of a home, prevention should also be practiced. Removal of brush and weeds can help keep populations low. Yard treatments are usually not practical or recommended. However, in cases of severe populations, sprays can be applied. Always check the label, and follow directions carefully. Make sure you select a chemical that will not harm plants.

If this document didn't answer your questions, please contact HGIC at **hgic@clemson.edu** or 1-888-656-9988.

#### Author(s)

Jonathan M. Sargent, Former Extension Graduate Assistant, Entomology, Clemson University Patricia A. Zungoli, PhD, Professor Emeritus, Clemson University Eric P. Benson, PhD, Professor Emeritus, Extension Entomologist, Clemson University

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2 of 2 2022-06-17, 7:59 AM