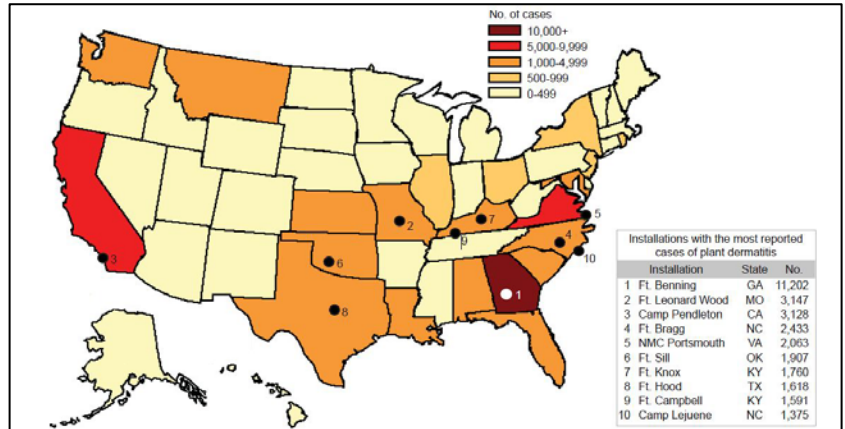


Military Service members live and train in areas where poison ivy grows. Contact with poison ivy causes an allergic reaction in approximately 80% of service members, who will experience an itchy, red rash with bumps and blisters (referred to as plant dermatitis). The risk of contact with poison ivy is highest during the summer; however, plant dermatitis affects U.S. military Service members throughout the year. Approximately one out of ten Service members diagnosed with plant dermatitis will have a second case. Personnel can prevent plant dermatitis by learning to recognize poison ivy and avoiding contact with the plant.




## How do I identify poison ivy?

Of the approximately 30 species of poison ivy found world-wide, only two species are found in the United States. Eastern poison ivy (*Toxicodendron radicans*) is a woody, climbing vine that can grow to be several inches in diameter, and reach a height of 30 feet. It often has a wooly or fuzzy, rope-like appearance, and can live for many years. Western poison ivy (*Toxicodendron rydbergii*) can also form a vine, but is typically more shrub-like. In both species, the characteristic leaves are always arranged in groups of three leaflets which alternate along the stems. The leaflet edges can be lobed, smooth or toothed with pointed tips. When leaflets first appear in the spring, they are shiny and reddish-green in color. In the fall, leaves turn various shades of red, orange, and yellow before turning brown. Flowers are small, yellowish and grow in clusters. The berry-like fruits are hard, greenish/white, and grow in loose, drooping clusters under the leaves. The poison ivy plants can regrow from the roots, which spread in all directions from the plant. Birds also spread poison ivy by eating the seeds and depositing them in their droppings around trees, power lines, and other roosting areas.



By-state map showing cases of plant dermatitis caused by poison ivy, oak, and sumac including the ten active duty military installations with the highest number of reported plant dermatitis cases from 2001-2010. Map: Armed Forces Health Surveillance Center, MSMR, Vol. 18 No. 07, July 2011

## Where does poison ivy grow?

Distribution and photos of the two poison ivy species found throughout the U.S. Green areas on map show where the plants are found. Western poison ivy (left) and Eastern poison ivy (right). Maps and photos: Jeff McMillian, hosted by the USDA-NRCS PLANTS Database of USDA. The PLANTS Database. National Plant Data Team, Greensboro, NC. (2012, 3 January)

Both species of poison ivy can be encountered in a wide variety of habitats within the U.S., from shady and moist, to open and dry areas. Within its specific range, it is commonly found growing along the edges of wooded areas, tree trunks, roadside thickets, building perimeters, stone walls, fences, railroads, clear-cuts, training areas, and orchard areas.

## Why is it important not to touch poison ivy?

Poison ivy contains a toxic oil called **urushiol**, pronounced "you-ROO-shee-ol". This toxic oil causes dermatitis in sensitive people. Urushiol is produced in all parts of the plant (except the pollen) in all growth stages and times of the year (even in dead and dormant plants). It is never safe to handle the plant without protection.

## What are the signs and symptoms of plant dermatitis?

After contact with urushiol, sensitized personnel will experience extreme skin irritation and blisters (called plant dermatitis). The oil must touch the skin to cause dermatitis, which can either happen directly by touching the plant, or indirectly by touching surfaces contaminated with the plant's oil such as gloves, clothing, shoelaces, tools, animals, or firewood. Urushiol can become airborne if poison ivy is mowed or burned, causing damage to skin, eyes, and lungs. Individual sensitivity can vary from extremely sensitive to nearly immune in a few individuals. Consult a medical professional for plant dermatitis diagnosis and treatment.

Symptoms from exposure usually appear within the first 12 to 24 hours, but may appear in as little as 3 to 4 hours or be delayed for several days. Many people are immune when young, but suddenly or gradually become sensitive to the oil as they get older, possibly due to multiple exposures to the oil. There is no way to make yourself immune to poison ivy; **never eat any part of the plant**, which can harm your digestive tract, damage your airway, and may result in death.

## What can I do if I suspect that my skin or clothes have contacted poison ivy?

Wash skin thoroughly with soap and cold water within 5 to 10 minutes after contact with poison ivy to reduce the likelihood and severity of a dermatitis reaction. After washing, wipe the area with rubbing alcohol or a solution of 50% water and 50% alcohol to dissolve the unabsorbed urushiol. Repeat rinse thoroughly, since this solution only flushes away the oil and does not deactivate it. Rubbing the rash will not spread poison ivy to other parts of your body or to another person.

**Caution:** Urushiol can remain active on contaminated clothing, bedding, tools, and other surfaces for years. Ordinary hot-temperature laundering will usually get rid of urushiol on fabrics. Contaminated tools, equipment, and surfaces should be thoroughly cleaned with soap and water to prevent re-exposure.

## How can I eliminate poison ivy from my property?

Poison ivy in the landscaping outside homes and workplaces is a significant nuisance. Contact preventive medicine services or the installation pest control office about poison ivy control. **Use extreme caution if trying to control poison ivy on your own. Always wear protective clothing to prevent skin contact with poison ivy and thoroughly wash hands, clothing, and tools after using either method described below.**

**Nonchemical Control:** Poison ivy can re-grow from the roots, so root removal is essential to control poison ivy. The roots can be pulled or dug up while the ground is wet. Alternately, young shoots can be cut down repeatedly until the energy stored in the roots is exhausted and the plant dies. Vines can be removed from trees, walls, and other upright structures by cutting them at the base and pulling them off of their support. Dispose of plant parts where they will not contaminate people or animals. Never try to destroy poison ivy with fire. Burning poison ivy causes urushiol to become airborne in the smoke, and can cause an allergic reaction on/in skin, eyes, throat, and lungs, and could result in death.

**Chemical Control:** Follow all label instructions according to each individual product. Herbicides for poison ivy may contain the active ingredients glyphosate, triclopyr, 2,4-D, and/or dicamba. These herbicides must be sprayed onto the leaves, stems and trunk to be effective. Use caution when applying these products in a garden or landscape setting because they will also kill most shrubs, broadleaf ground covers, and herbaceous garden plants. It is possible to spray poison ivy without killing other plants if you pull the branches away from the desirable plants and wipe the foliage with the herbicide, or shield the other plants from the chemical. Use caution when disposing of dead plants as they still contain urushiol.

## Where can I get more information about poisonous plants?

Centers for Disease Control and Prevention: <http://www.cdc.gov/niosh/topics/plants/>

U.S. Food and Drug Administration: <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm049342.htm>



**Plant dermatitis:** In sensitized individuals, symptoms such as itching, swelling, and blisters appear after contact with urushiol. Photo: DermNet.com