

Poison Ivy, Oak, and Sumac

Employees should take precautions when working in and around wooded areas and in heavy foliage because they may come in contact with poison ivy, oak or sumac. In San Diego County, employees are most likely to encounter poison oak. Approximately 90 percent of Americans are allergic to these plants that cause a bothersome rash and intense itching.

Touching the stems, roots, or leaves of these plants results in direct contact of skin with urushiol (pronounced oo-roo-shee-ohl) oil. The cause of the rash, blisters, and infamous itch is from the exposure to urushiol, a chemical in the sap of poison ivy, oak and sumac plants. Urushiol can stick to tools, shoes, clothes, or anything. Touching them could cause a reaction in a susceptible person.

Sensitivity to urushiol can develop at any time. Almost all parts of the body are vulnerable to the sticky urushiol. Urushiol must penetrate the skin to cause a reaction. Places where the skin is thick, such as the soles of the feet and the palms of the hands, are less sensitive to the sap than areas where the skin is thinner.

Urushiol Oil is Potent

Urushiol oil is potent and it only takes a small amount to cause an allergic reaction.

- Only 1 nanogram (billionth of a gram) is needed to cause a rash.
- The average person is exposed to 100 nanograms per exposure.
- 500 people could itch from the amount covering the head of a pin.
- 1 to 5 years is normal for urushiol oil to stay active on any surface including dead plants.

Quick Action Needed

Because urushiol can penetrate the skin within minutes, do not waste time if exposed. The faster the victim's skin is cleansed, the greater the chance of removing the urushiol before it gets attached to the skin. Cleansing may not stop the initial outbreak of the rash if more than 10 minutes has passed, but it can help prevent further spread.

If exposed to poison ivy, oak or sumac, if possible, stay indoors until the following steps are completed:

1. Cleanse exposed skin with generous amounts of isopropyl (rubbing) alcohol. (Don't return to the woods or yard the same day. Alcohol removes your skin's protection along with the urushiol and any new contact will cause the urushiol to penetrate twice as fast.)
2. Wash exposed skin with water. (Water temperature does not matter; if you're outside, it's likely only cold water will be available.)
3. Take a shower with soap and warm water. Do not use soap before this point because soap tends to pick up some of the urushiol from the surface of the skin and move it around.
4. Clothes, shoes, tools, and anything else that may have been in contact with the urushiol should be wiped off with alcohol and water.

Wear gloves or cover hands while completing the steps and then discard the hand covering.

Dealing with the Rash

If the victim doesn't cleanse quickly enough, or the skin is so sensitive that cleansing didn't help, redness and swelling may appear in about 12 to 48 hours. Blisters and itching will follow. For those rare people who react after their very first exposure, the rash appears after 7 to 10 days.

The rash will only occur where urushiol has touched the skin. However, the rash may seem to spread if it appears over time instead of all at once. This is either because the urushiol is absorbed at different rates in different parts of the body or because of repeated exposure to contaminated objects or urushiol trapped under the fingernails.

The rash, blisters and itch normally disappear in 14 to 20 days without any treatment. But few people can handle the itch without some relief. For mild cases, wet compresses, or soaking in cool water may be effective. Oral antihistamines can also relieve itching.

The U.S. Food and Drug Administration (FDA) also considers over-the-counter topical corticosteroids (commonly called hydrocortisones) are normally safe and effective for temporary relief of itching.

For severe cases, prescription topical corticosteroid drugs can halt the reaction, but only if treatment begins within a few hours of exposure.

There are a number of over the counter products to help dry up oozing blisters, including:

- aluminum acetate (Burrows solution);
- baking soda;
- Aveeno (oatmeal bath);
- aluminum hydroxide gel;
- calamine;
- kaolin;
- zinc acetate;
- zinc carbonate; and
- zinc oxide.

For the Rash:

Hydrocortisone creams or sprays reduce the inflammation, swelling, and itching of rashes. Lotions containing calamine, zinc acetate, and alcohol dry the blistered rash quickly and can speed healing.

A rash can last 1-4 weeks. Treating the itching is especially important, since scratching can lead to skin infection.

Antihistamines are available as topical (cream, lotion, or spray) or oral. The oral forms are probably more effective, but can cause drowsiness.

Drying agents like calamine or other lotions are very soothing and speed healing of the rash. Cool soaks in baking soda, commercial oatmeal, or colloidal baths for 15-30 minutes can relieve itching for several hours at a time.

Signs of an Emergency

About 15 percent of the 120 million Americans who are allergic to poison ivy, oak, and sumac are so highly sensitive to the plants that they break out in a rash and begin to swell in 4 to 12 hours instead of the normal 24 to 48. Their eyes may swell shut and blisters may erupt on their skin. **This is an emergency. Call 911 and get them to a hospital as soon as possible.**

It is recommended that workers wear long pants, long sleeves, boots, and plastic gloves under cotton gloves for protection when working in wooded areas and in heavy foliage.

Myth

The rash is contagious.

Fact

Rubbing the rash won't spread poison ivy to other parts of your body (or to another person). You spread the rash only if urushiol oil - the sticky, resin like substance that causes the rash - has been left on your hands.

Myth

You can develop an allergic reaction simply by being near the plants.

Fact

Direct contact with the plants is needed to release urushiol oil. Stay away from forest fires, direct burning, and lawnmowers and trimmers when they are being used because they can cause the urushiol oil to become airborne.

Myth

Leaves of three let them be.

Fact

Poison sumac has 7 to 13 leaves on a branch, although poison ivy and oak have 3 leaves per cluster.

Myth

Do not worry about dead plants.

Fact

Urushiol oil stays active on any surface, including dead plants, for up to 5 years.

Myth

Breaking the blisters releases urushiol oil that can spread.

Fact

Not true. However wounds can become infected and make the scarring worse. In very extreme cases, excessive fluid may need to be withdrawn by a doctor.

Myth

I've been in contact with poison ivy many times and never broken out. I'm immune.

Fact

Not necessarily true. The more times a person is exposed to urushiol, the more likely they will break out with an allergic reaction. For the first time sufferer, it generally takes longer for the rash to show up - generally in 7 to 10 days.



Figure 1 Poison Ivy



Figure 2 Poison Oak



Figure 3 Poison Sumac

Poison Oak

Zumaque Venenoso

(tambien conocido a veces como hiedra venenosa)



Learn to recognize poison oak in every season. The plant can cause your skin to blister and itch.

Aprenda a reconocer el zumaque venenoso en cada estación. Esta planta puede ocasionar ampollas y picazón en la piel.

Poison oak in spring
and early summer

Zumaque venenoso
en primavera y a
principios del verano



Poison oak with flowers

Zumaque venenoso
con flores

Poison oak with berries

Zumaque venenoso
con bayas



Poison oak in the late
summer and fall

Zumaque venenoso
a fines del verano y
en otoño