

There are several types of poisonous plants throughout the United States, the most prevalent in California is Western Poison Oak. Outdoor workers may encounter poison oak while completing necessary job tasks such as weed eating, clearing brush, or pruning. The leaves, stems, berries, and roots of poison oak contain an oil with a sticky, allergenic substance called urushiol that can cause a reaction when it touches human skin. Most people are allergic to urushiol (yu-ru-shee-uhl) and when it contacts the skin an itchy, red, blistering rash will develop 24-72 hours after contact. According to the UC Integrated Pest Management Program, the number of working hours lost because of poison oak makes it the most hazardous plant in California. Identifying and avoiding the plant is the best line of defense to protect yourself.

Hazard Identification

Poison oak is characterized by three lobulated leaves or deeply toothed edges attached to each node on a stem. The leaves may have a waxy appearance and change colors from green in the summer and spring to yellow and red in the fall. Poison oak can grow as a vine or a shrub and often grows in wooded areas, grasslands, and coastal scrub areas. The old saying "Leaves of three, let it be!" is a helpful reminder for identifying poison oak.

Working in Areas

If Working in known areas mitigate and treat in advance (see hazard correction below). Urushiol sticks to anything it contacts and can retain its ability to cause an allergic response for years. This means that tools, clothing, vehicles, and others can continue spreading the oil long after initial contact if not cleaned properly. Avoid touching your face, skin, and clothing while working in areas with

poison oak. To assist with reducing exposure to poison oak, wipes formulated to gently remove the irritating oils can be added to all vehicle first aid kits. Direct contact with the plant or other surfaces with urushiol on them is not the only way you can develop symptoms. The smoke from burning poison oak also contains urushiol, so inhaling it can irritate your nasal passages and cause severe inflammation of the lungs. When exposure to burning poison oak is suspected or unavoidable, employers should provide workers with a NIOSH-approved respirator in accordance with T8, Section 5144, Respiratory Protective Equipment. In addition, employees need to complete the Respiratory Medical Evaluation Questionnaire and fit testing before using a respirator.





Symptoms

The symptoms from contact with poison oak can occur as an allergic reaction to urushiol. It can last 2-3 weeks and will eventually resolve on its own without treatment. This allergic reaction causes a red, raised streaking where the oil has contact with the skin. Tender, fluid-filled blisters may develop and may burst and ooze. After the blisters burst, they crust over. Variations in the time of appearance of the rash and the severity of the rash are caused by differences in the amount of oil absorbed.

First Aid

The best way to remove the oil is to wash the exposed area with a damp washcloth and liquid dishwashing soap, such as Dawn. Be sure to thoroughly wash hands and clean under the fingernails as it could spread to the eyes, genitals, or other body parts. All exposed clothing and equipment should be washed thoroughly with soap and water. The oil must be removed first before you can treat the rash. Avoid scratching as it slows the healing and can lead to scarring and/or infection. Medical treatment for poison oak depends on the severity of the symptoms. Mild cases can be treated with over-the-counter medications aimed at minimizing itching. Post-contact skin cleansers, such as Tecnu, may be used after possible contact with urushiol oils. Drying agents like calamine lotion can help relieve itch and dry seeping areas. Seek immediate medical treatment if you have difficulty breathing, swallowing, or fever.

Hazard Correction

To protect against poison oak, you should be able to recognize and avoid contact with the plant. Other personal protection equipment (PPE) considerations to reduce exposure to poison oak and improve potential workers' compensation claims are coveralls/suits, pants, long sleeve-shirts, rubber boots, and thick washable disposable gloves. The application of barrier creams may also be applied before exposure and tools can be wiped down between uses. An excellent resource to support this training is a DVD on *Poison Oak and Ivy* from JPIA's Lending Library. JPIA members may view and check out this video or any other Lending Library materials from our Training webpage.



Poison oak growing as a vine.



Photos: James-Whitney/Unsplash.com; University of California Agriculture and Natural Resources

