

Poisonous Plants

A Fact Sheet prepared by the National Telecommunications Safety Panel

Introduction

Operations involving outdoor work will inevitably encounter plants that cause an adverse reaction in humans. The reaction is an allergic reaction, where people develop a sensitivity to such plants as poison ivy, oak or sumac after several encounters with the plants, sometimes over many years. However, sensitivity may occur after only one exposure. Approximately 85 percent of the population will develop an allergic reaction if exposed to poison ivy, oak or sumac.

What are the Hazards of Poisonous Plants?

- Poison oak, poison ivy, and poison sumac all contain a highly irritating allergenic phenolic compound called urushiol (pronounced oo-roo-shee-ohl)
- All parts of the plant, green or dried, contain the compounds
- Almost all parts of the body are vulnerable to the sticky urushiol
- Urushiol that's rubbed off the plants onto other things can remain potent for years, depending on the environment
- Smoke from burning the plants can contain droplets of this toxin and will affect people who are highly allergic to urushiol

What are the Symptoms of Exposure to Poisonous Plants?

- Severe reddening, swelling and even blistering of the skin
- Intense itching results from the acute allergic response in the skin

What are the Most Common Poisonous Plants that Cause Problems for Telecommunications Workers?

Poison Ivy

Description

- It appears as a woody, ropelike vine, a trailing shrub on the ground, or a free-standing shrub
- Normally has three leaflets (groups of leaves all on the same small stem coming off the larger main stem), but may vary from groups of three to nine
- Leaves are green in the summer and red in the fall
- Has yellow or green flowers and white berries



Locations

- The plant typically grows along riverbanks, in moist woods, but also in pastures, fencerows, and roadsides
- Poison ivy can be found in every region of the United States, except the Southwest, Alaska, and Hawaii



Poison Ivy

Poison Oak

Description

- It grows in the form of a shrub 1 to 6.5 feet tall and has three leaves similar to poison ivy; however, it does not climb
- Leaflets are thicker, dull green, hairy on both surfaces, broadest above the middle, and often lobed or coarsely serrated
- Has clusters of yellow berries

Locations

- Found on the West Coast and throughout the South; most abundant on relatively dry, sunny sites in woodlands, thickets, and old fields



Poison Oak

Poisonous Plants, continued

Poison Sumac

Description

- Rangy shrub up to 15 feet tall
- Seven to 13 smooth-edged leaflets
- Leaves are dark green in summer, and red in the fall
- Glossy pale yellow or cream-colored berries

Locations

- Grows in boggy areas, especially in the Southeast



Poison Sumac

How Do You Prevent Exposure to These Poisonous Plants?

- Learn to identify poison ivy, oak, and sumac to avoid exposure
- Cover skin with clothing (long sleeves, long pants, shoes, and socks) when walking in the woods or in areas where these plants may grow
- Use barrier creams around poisonous plants, as appropriate
- Keep your hands away from your eyes, mouth and face

What is First Aid Treatment for Poisonous Plants?

After Suspected Exposure

Because urushiol can penetrate the skin within minutes, immediately cleanse the skin after you determine that you have been exposed. Cleansing may not stop the initial outbreak of the rash if more than 10 minutes has elapsed, but it can help prevent further spread.

If you've been exposed to poison ivy, oak or sumac:

- Cleanse exposed skin with generous amounts of isopropyl (rubbing) alcohol
- Then wash skin with water
- Finally, take a regular shower with soap and warm water
- Clothes, shoes, tools, and anything else that may have been in contact with the urushiol should be wiped off with alcohol and water if possible

- Be sure to wear gloves or otherwise cover your hands while doing this and then discard the hand covering

If a Rash Appears:

Description

- If the area was not cleansed adequately, redness and swelling will appear in about 12 to 48 hours.
- Blisters and itching will follow
- Some people will react immediately or the rash can appear after seven to 10 days
- Oozing blisters are not contagious nor can the fluid cause further spread on the affected person's body because they don't contain urushiol
- The rash, blisters and itch normally disappear in 14 to 20 days without any treatment

Mild Cases

- Use wet compresses or soaking in cool water
- Oral antihistamines can also relieve itching
- Over-the-counter (OTC) topical corticosteroids will provide temporary relief of itching

Severe Cases

- Prescription topical corticosteroid drugs can halt the reaction, but only if treatment begins within a few hours of exposure
- OTC products will help dry up the oozing blisters. These include baking soda, kaolin, oatmeal bath, calamine and zinc oxide
- Seek medical treatment for more severe reactions

Additional Information

- Oklahoma State University
<http://www.pp.okstate.edu/ehs/links/poison.htm>
- Cornell University
<http://www.ansci.cornell.edu/plants/index.html>
- U. S. Food and Drug Administration
http://www.fda.gov/fdac/features/796_ivy.html
- American Academy of Dermatology
http://www.aad.org/public/Publications/pamphlets/Poison_IvyOakSumac.htm