
THE "INFO"-HALER



TAKE IN THE INFORMATION

An easy to understand, informative newsletter for our patients of all ages from the
Allergy & Asthma Associates of Michigan, P.C.

POISON IVY

Poison ivy is the number one cause of contact dermatitis in the United States. Over nine million people a year seek treatment for poison ivy. It has been estimated that between 70-85% of the U.S. population would acquire poison ivy if exposed casually to the plant. Poison ivy can occur at any age. It does not discriminate for sex, race, or color of skin.

Poison ivy, poison oak, and poison sumac all belong to the Rhus group of plants. The Rhus group of plants contain a chemical called urushiol (you-rue-she-ol) which is the allergen responsible for causing contact dermatitis. Urushiol is an oily resin found in the leaves, stems, roots, and flowers of the plant. It remains antigenic even after the plant has died. Exposure to urushiol results in an allergic, eczematous, contact dermatitis characterized by itchy, red, blistered pustules which usually rupture, ooze, and then have subsequent crusting. Unlike irritant contact dermatitis where symptoms appear immediately, there is an interval of time of between a few hours to several days from contact with poison ivy to the appearance of symptoms. Once a reaction starts, it takes fourteen to twenty-eight days to resolve, even with treatment.

If you suspect contact with poison ivy, oak, or sumac, immediately wash your entire body and clothes too, with soap and water. The poison ivy antigen enters the body so rapidly that the oil must be totally removed within ten minutes of exposure. Urushiol is non-volatile and dries quickly on clothes, shoes, furniture, tools, golf clubs, household items, the family pet, and even under a person's fingernails, retaining its potency for months or even years. It is imperative that all items exposed to urushiol be washed with soap and water or re-exposure may occur when these items are used again. The catechols in urushiol are soluble in rubber, therefore, rubber gloves do not protect the hands from poison ivy (heavy duty vinyl gloves can be used). Poison ivy, when crushed, can produce airborne particles causing sensitive people to have severe reactions. Poison ivy may also be spread in the smoke of a burning plant because of tiny droplets of urushiol present on the particles of dust from the smoke. These airborne particles may cause conjunctivitis, and dangerous throat, mouth, and lung inflammations. Urushiol will not turn into a vapor, however, and cannot be spread as a gas. Once the skin has been washed, you cannot get another reaction from touching the poison ivy rash or blisters, and the fluid from the blisters will not spread the disease to other individuals.

The best treatment for poison ivy is prevention. It is imperative to be able to identify the plants and avoid them. The general rule is leaves of three, let them be. Poison sumac is a low shrub-like plant with pointed oval leaflets that grow in clusters of three. Sumac often have yellow berries and are found in wooded, swampy areas. Poison oak leaflets are blunt at the tip, can be glossy or dull, grow in clusters of three, and the center leaf resembles an oak leaf. Poison oak has white berries. Poison ivy grows as a low shrub but may vine to heights of up to thirty feet. It generally grows in leaves of three, but can have as many as five or more (up to seventeen) leaves. It may have yellow or green flowers and the leaves range from one to six inches long and are oval shaped. In the fall, small white berries appear and the leaves turn red.

The Rhus group of plants are extremely difficult to eradicate. The recommended method of killing the plant is spraying with herbicides; however, all vegetation in the area may also be killed. Spraying generally has to be repeated numerous times over the course of a year.

Contact dermatitis should be treated by a physician. The treatment is symptomatic as the disease runs its course and lasts fourteen to twenty-eight days with or without treatment. The treatment may consist of any or all of the following depending on the severity of the reaction: cortisone creams, antihistamines, soothing lotions, cool wet dressings with Burow's solution or Epsom salts, hot showers, potassium permanganate or Aveeno baths, corticosteroid hormones, and sedatives. It is imperative that once treatment is started, it be continued for at least three weeks. If stopped abruptly, a rebound reaction may occur with a return of the dermatitis to its original intensity.

The Rhus group of plants belongs to a larger family of plants called the Anacardiaceae family. Individuals sensitive to poison ivy may also react to contact with other plants in the family. These cross-reactions may occur with exposure to mangoes (particularly the rind or tree sap), cashew oils (and items made with the oil like swizzle sticks, Haitian voodoo dolls, varnishes, brake linings, electrical insulation, printer's ink), furniture lacquer from the Japanese lacquer tree, the Florida holly plant, and others.

If you know you may be in an area where poison ivy exists (e.g. woods), there are certain substances that can be applied to the skin prior to contact which bind to urushiol and hence create a barrier to prevent urushiol from bonding with the skin. These products are sold over the counter and go by the names of "Ivy Block", "Stoko Guard", and "Poison-Oak-N-Ivy Armour." It is recommended that they be applied to the skin fifteen minutes before potential contact with poison ivy, and every four hours thereafter. Remember, however, that urushiol may be on your clothes or your possessions and will need to be washed out to prevent future exposure.

Finally, once you develop poison ivy, you become more susceptible to reoccurrence. Avoidance is imperative!

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